User's Guide

A600 GS

CREDITS

For AmigaKit Ltd:

Lead Developer ….. Andrew Broad
Developer ….. Constantinos Nicolakakis
Developer …... Kevin Sherratt
Developer ….. Dimitris Panokostas
Developer ….. Thomas Rapp
Developer ….. René W. Olsen
Software Contributor …...Peter Keunecke
Software Contributor.. Jean-François Fabre
Software Contributor …... Kari-Pekka Koljonen
Software Contributor ….. Fredrik Wikstrom
Software Contributor ….. Paolo Cattani
Software Contributor ….. Dom Cresswell
Graphic Design ….. Kevin Saunders
Graphic Design ….. Paul Kitching
Icons and Backgrounds ….. Stef Verheijen
Music ….. Markus Kaarlonen
Hardware Support ….. Christopher Follett
Hardware Support …... Alex Perez
Hardware Support …... Morio Sakaguchi
Project Management ….. Matthew Leaman

For A-EON Technology Ltd:

Personal Paint Lead Developer ….................................... Andrew Broad
OctaMED Lead Developer.. Andrew Broad
Additional Support ….. Trevor Dickinson

In memory of Ray Burt Frost
for his enduring commitment to OctaMED

Table of Contents

Table of Contents

The A600GS computer is a powerful, easy to use and inexpensive way of running most Classic 68K OCS, ECS & AGA games and application software.

Classic games can be added and started through the games menu. Well known applications such as OctaMED, Personal Paint and Directory Opus are ready to run through the pre-installed AmiBench desktop.

Features

- Games menu system
- AmiBench desktop
- Up to 1GB Fast Memory
- Dual 9-pin Joystick Ports
- Micro HDMI with1080p output for HDMI television or monitor
- Wireless Internet
- Bluetooth
- USB data ports x3
- 3.5mm Stereo Audio Out

Related Documentation

The AMIGA.org® Wiki contains documentation for the A600GS and AmiBench. For additional information use the following links:

```
wiki.amiga.org/amibench

wiki.amiga.org/a600gs
```

Before You Begin

• Choose a location for your system away from heat, direct sunlight, dust, smoke,vibration, moisture and electrical interference.

• Choose a flat, stable work surface at least 6 inches / 15 cm away from wall.

• Do not cover any of the case's ventilation grills or operate the system in an enclosed space where it can overheat.

• Have on hand a good quality USB power supply of at least 2 Amps rating or position your system next to a USB wall socket.

• Read the descriptions in this chapter to acquaint yourself with the purpose and function of each feature and connector.

Contents

Please check you have the following items supplied in the box:

• A600GS computer

• A600GS joypad controller

• USB power cable with integrated power switch

• Micro HDMI to HDMI cable

Optional peripherals:

• Double tick logo branded USB mouse
• Double tick logo branded USB keyboard

Ports

The data, audio and power ports on the A600GS are shown below:

9-pin joystick port

9-pin joystick port

USB port x2

Ethernet

USB port

USB Power In

Micro HDMI Out

Stereo Audio Out
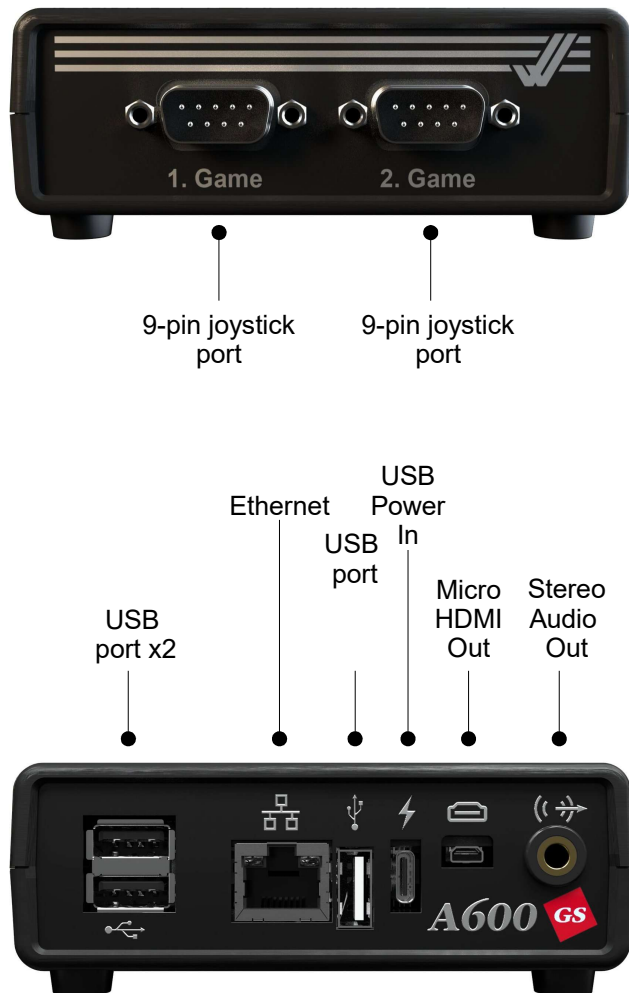
A600 **GS**

Wireless networking and Bluetooth are integrated on board.

Attaching Speakers

Apart from HDMI audio and Bluetooth audio, the A600GS also features a 3.5mm stereo audio output socket.

To attach the audio cable, push the jack into the socket. It will click into place securely.

Refer to *Audio Preferences* in the *Getting Started* section to enable audio output on the 3.5mm stereo socket

Attaching Ethernet
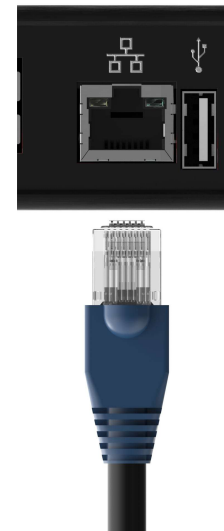
Apart from wireless networking, the A600GS also supports a wired Ethernet connection.

To attach the RJ45 Ethernet cable, push the RJ-45 plug into the socket. It can only be inserted one way with the release catch at the top. It will click into place securely. To remove it push down on the release catch and gently pull the RJ-45 plug out.

Refer to *Network Preferences* in the *Getting Started* section to enable network on the Ethernet socket

Attaching Mouse & Joypad

To attach the supplied A600GS mouse or joypad, plug the cable into any of the USB ports on the rear of the A600GS. Press firmly, but do not force. The cable connector is designed to fit snugly into the USB port and only in one orientation.

Leave a clear area approximately 12 inches (30CM) square to the right or the left of the A600GS so that you have room to move the mouse freely. Using the optional A600GS mouse pad helps keep the mouse from getting dirty and makes it respond better.

Attaching 9-pin Joystick

To attach a Commodore compatible 9-pin joystick, plug the cable into any of the 9-pin ports marked *Game* on the front of the A600GS. Press firmly, but do not force. The cable connector is designed to fit snugly into the port and only in one orientation.

Attaching HDMI TV / Monitor

The A600GS has a micro HDMI display output port for connection to a HDMI television or monitor.   It outputs 1920 x 1080 resolution in 32-bit colour (1080P).

Ensure the A600GS and the the TV / monitor display are powered off.   To attach the television or monitor, plug the micro HDMI cable into any of the HDMI output port on the rear of the A600GS. Press firmly, but do not force. The cable connector is designed to fit snugly into the micro HDMI port and only in one orientation. Similarly plug the standard size HDMI connector firmly into the display's HDMI socket. It is once again orientated to plug in one way.

Connecting Power & Turning On

The A600GS features a USB-C port on the rear to accept power in.

The supplied USB power cable should be pushed firmly into the USB Power In socket.   The other end of the cable is for connection into a wall socket with a USB type A socket.   Once again push firmly, but do not force. The cable connector is designed to fit snugly into the USB wall socket and only in one orientation.

There is a push switch on the cable to switch on power. Please refer to the *Shut Down* section for switching the A600GS off.

If you alternatively wish to use a dedicated USB power supply please ensure it delivers at least 2 Amps at 5 volts.

The Joypad

The features of the joypad are:

• 4x independent fire buttons:

 Blue button   backspace shortcut for virtual keyboard

 Yellow button   escape from sub-menu or close virtual keyboard

 Red button   select an option when highlighted

 Green button   toggle between numeric/letters on virtual keyboard

• 2x function buttons:

SELECT   Select button   Change disks, save state or snapshot display.

START   Start button   Start or pause a game, scene demo or application.

• 2x shoulder pads

The Virtual Keyboard

If you do not have a USB keyboard attached, you can open the on screen keyboard by pressing the red fire button on the joypad whilst in an input box. This virtual keyboard will then be displayed at the bottom of the screen.

Navigate the keys by using the joypad cross hairs or shoulder pads.

The red button will select the key that is currently highlighted.

You can change to upper case keys by selecting the ↑ Shift key on the on screen keyboard.

Numeric keys can be shown by selecting the 123 key on the virtual keyboard or green button on joypad.

Backspace can be initiated by pressing the blue button on joypad.

Return can be initiated by pressing the yellow button on the joypad.
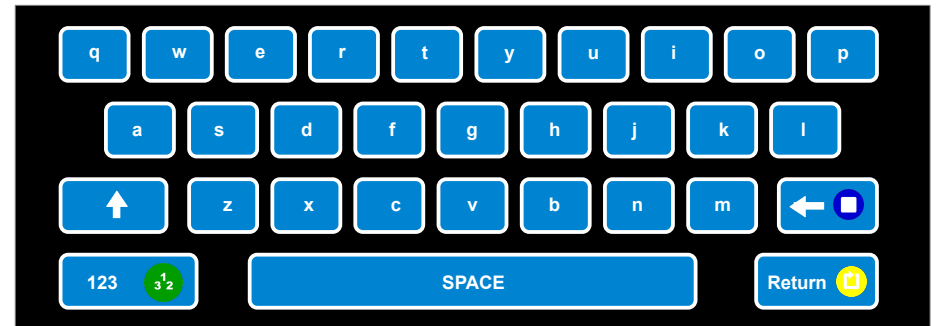
First Boot

Welcome Screen

Once powered on the A600GS the display will initialise after a few seconds. The system will begin to boot with a progress bar.   Once the boot process is complete the welcome screen will be shown as above.

Start Main Menu

Press left mouse button or any button on the joypad with the exception of the yellow button to access the main menu used for launching and configuring games, applications and scene demos. If a keyboard is attached then you can hit any key except for the Return key to proceed to the games/apps menu.

Start AmiBench

To run AmiBench directly from this point, please press either yellow button on the joypad, right mouse button or *F12* on keyboard.

## *Overview Of Main Menu*

The main menu is an easy to use interface to navigate, browse and start games, applications and scene demos.

There are various rows and columns of icons to run and manage the library of titles and the A600GS settings. Here is an overview:

AmiSphere Profile section provides login access to the AmiSphere server. The user account can be created and the A600GS product can be registered for online system updates.

Games And Applications section reverts the screen to the games, apps and demos browser.

Manage ROM Files section manages the third party system ROM files that can be added to the A600GS for better compatibility with games.

System section provides configuration options for Audio, Display, Controllers, Language/Keyboard, Network, Bluetooth, Backup And Restore
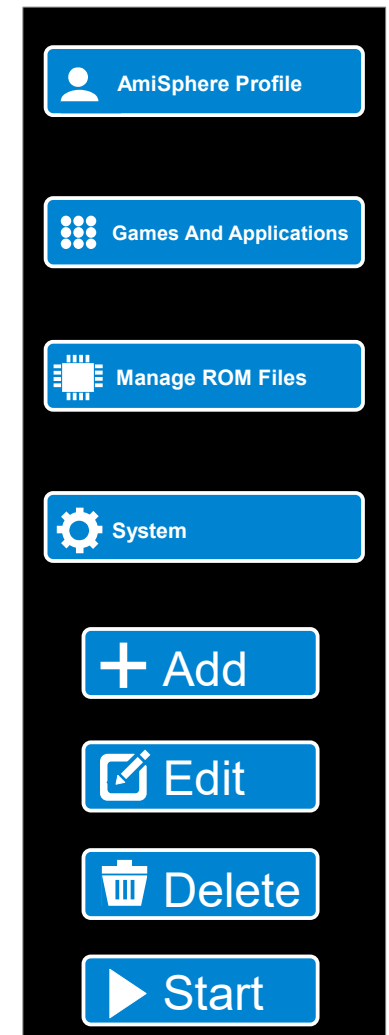
Shut down section:

Add button is used to add titles (games, applications or scene demos) to the A600GS internal storage.

Edit button is used to edit the information panel and configuration settings for a selected title.

Delete button is used to permanently remove a selected title from the A600GS internal storage

Start button runs a selected title

Browsing Games, Apps or Scene Demos

The games, applications and scene demos can be browsed and scrolled through in alphabetical order. Each title is depicted by a floppy disk icon.

To navigate the icons, use the directional cross hairs on the joypad, keyboard cursor keys or mouse to scroll up and down the library of titles. Use the same method to highlight each icon turning it blue. Pressing the red fire button, return key or left mouse button selects the title. The selected disk Icon will be surrounded with a gold box outline.

Default Icon State   *Highlighted Icon*   *Selected Icon*

When the icon is selected, the left side of the screen displays the title's information panel. The option buttons become active at the bottom of the screen; *Add*, *Edit*, *Delete* (if not protected from deletion) and *Start*.

Filtering Options

Navigate to the top of the screen to the three blue *Filter* icons. Use either the mouse, keyboard cursor keys or joypad's left/right shoulder pad buttons to cycle between these icons. The three icons are Applications, Games and Scene Demos representing the type of title contained in the software library on the A600GS. Icons are selected with the red fire button, Return key or left mouse button. Upon selection the icon will turn yellow and exclude the other types of titles which are not selected. For example, selecting only the joystick icon shows all games excluding apps and scene demos. Multiple filter icons can be selected.

Search Titles

The search text box adjacent to the *Filter* icons can be used to find specific titles in the A600GS software library by their name. Enter the first few letters of a title and the software library will dynamically sort.

Adding Games, Apps or Scene Demos

To add your games, apps or scene demos to the main menu, you need to first highlight and select the *Add* button at the bottom of the screen.

A file/directory list will appear on the left hand panel with the title "*Select The Data Files To Import*". Insert your USB flash drive into one of the free USB ports on the rear of the A600GS. It should contain the game, app or demo you wish to add in the file format of *ADF*. A few seconds later the list of directories and files contained on the USB will appear.

Use your joypad left and right shoulder buttons to navigate through the files and directories until you reach the filename you wish to select. You can also use the mouse or keyboard tab/cursor keys the filename to select the filename. If the title has multiple ADF files, select each disk until they become all highlighted.

Once the filename(s) are highlighted the *Select File* button will become illuminated.   Use the joypad to navigate to this button and press the red fire button to confirm selection. The file/directory list will disappear and be replaced by an array of options relating to that ADF.

The *Title* box will be prefilled but can be edited to the user's preference.

The *Subtitle*, *Author* and *Publisher* boxes are optionally set to the user's preference.

Protection for deletion tick box prevents title being inadvertently deleted.

The *Model* options are used to set compatibility with the title.   Many older titles were written for earlier OCS/ECS machines and have compatibility problems with the later AGA machines.

The *Category* option can define and set the title to either a *Game*, *Application* or *Scene Demo.*

The *Choose Thumbnail* option will return to the file list where an image can be selected to represent the title. Alternatively while running the title a screenshot can be captured- refer to *Pause Menu* section for details.

The *Save Changes* button saves the changes to the title.

Edit Games, Apps or Scene Demos

To modify the settings of your games, apps or scene demos, you need to first highlight and select the *Edit* button at the bottom of the screen.

The left hand side of the screen will be displayed with various options. The operation of these are described in the section *Adding Games, Apps or Scene Demos*.

Navigate down the *Edit* screen using the joypad's right shoulder button and then when the option is highlighted press the red fire button. Alternatively navigate over the option's button with the mouse and select it by clicking the left mouse button.

Use Turbo Speed Floppy Drives

Once this option is selected the title will load faster.   Please note that some games use custom loading routines that are incompatible with the *Turbo Speed* option.

Customise Memory Setup

Some titles have specific memory requirements to run.   To maintain compatibility for that title an option named *Customise Memory Setup* can be selected.   Once selected, a section will open revealing options of *Chip Memory*, *Slow Memory* and *Fast Memory*. Most early *OCS/ECS* games require an equal mix of 512Kb *Chip Memory* and 512Kb *Fast Memory* and this provides good compatibility most of the time. *AGA* games need 2MB *Chip Memory* and sometimes additional *Fast Memory*.

Disk Files

This section contains a list of the disk(s) associated with the title.

B A title may have more than one disk so the Boot disk is denoted by an icon with a B adjacent to it. Only one disk can be nominated as Boot and this is usually disk 1.

A disk file can be removed by selecting the *Trashcan* icon next to the file name.

The *Save Changes* button saves the changes to the title. If you want to test settings but not commit to them permanently, the Use Changes button can be useful.

Backup And Restore

Any titles and data you store on the *A600GS* can be archived n the *Backup And Restore* section. To open the screen, navigate to the *System* button on the left side of the screen and select it. Navigate to button named *Backup And Restore...* and select it.

There are four sections that can be archived and restored:

• SystemV46
• Programs
• Work
• Games, Scene Demos And Applications

Select the tick box next to each section that should be backed up to a USB flash drive or restored from a USB flash drive. If using the joypad you can navigate using the shoulder pads and select by pressing Red fire button. Select the *Create Backup Archive* or *Restore From Backup Archive* button respectively.

A file list will be displayed. Insert the USB flash drive. Select the *Volumes* button- it will take a few seconds to display in the list.   Navigate to sub-directories by selecting drawer icon next to the directory name.

To initiate the backup process select the *Choose Backup Location*. A backup archive will be created and saved to the selected location.

To restore a previously created backup select archive's file name and then select the *Choose Archive To Restore* button.

Restore To Inbuilt Defaults

The four volumes can be restored to factory defaults. Select the volume to restore and then select the *Restore To Inbuilt Default* button. This function will overwrite any selected volume with the default factory image.

Saved Games

The A600GS has a Save Game feature.   While progressing through a game, the game can be paused and saved.   It will be preserved in that state even when the A600GS is powered off.

Games can be saved at multiple points in the game as the player progresses through. The game can later be resumed instantly from any of these saved states.

This functionality is also useful to bypass loading screens.

To select and resume from a saved game, navigate to the game floppy icon from the main menu and select it. It will appear on the left hand panel.   Select the *Saves* button. A similar screen will be displayed as shown.

Each saved state has a date and time corresponding to when it was saved. A small representative screenshot is captured at the point of saving. This is also displayed in the icon titled by the date and time.

Navigate to the saved state you want to resume from then select it. Pressing the *Start Save* button will instantly resume the game at the point it was saved.
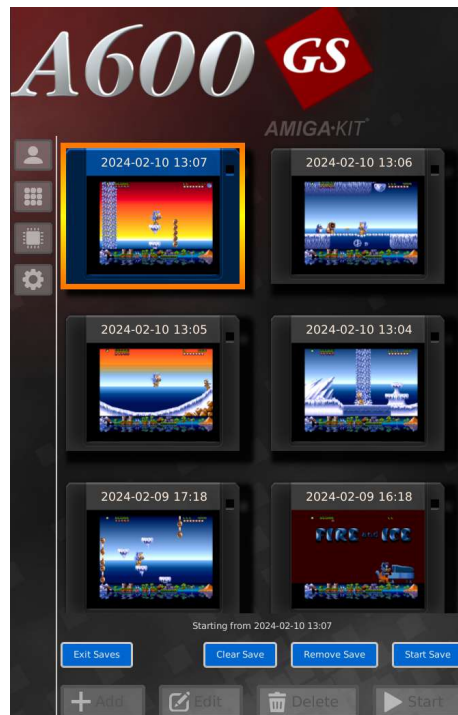
The *Remove Save* button will delate that saved game permanently.

The *Clear Save* button clears the selected save game and instead starts the game from scratch.

The Pause Menu

When running any game or application it can be halted by pressing the Start button on the joypad. The Pause Menu will be displayed in the centre of the screen offering several options. To close this menu and resume using the game or application, either select the Resume option with the Red button. Alternatively press the Start button again on the joypad.

Minus (-) button: the sound volume levels can be decreased in 10 percent steps.

The audio icon shows the current sound volume level. Selecting this button can either mute or unmute the sound.

Plus (+) button: the sound volume levels can be increased in 10 percent steps to a maximum of 150 percent.

Disk Changer button: for multi disk titles, change between the currently inserted disks

Save Screenshot To Storage button: capture the screen image of the currently halted game/application. Screen grab will be saved to storage area.

Save Screenshot To Thumb button: capture the screen image of the currently halted game/application. Screen grab will be resized and saved as the game's disk thumbnail image on the main menu.

Save State button: save the current state of the game/application. It can then be resumed from the start or at the current saved state.

Reset button: reset the currently running game/application. The selected game/application will then attempt to reboot.

Quit button: close down the game/application that is currently running and return the to main menu.

Audio Preferences

The A600GS audio output is configured in the *Audio Preferences* section. To open the screen, navigate to the *System* button on the left side of the screen and select it. Navigate to *Audio...* button and select it.

The first option is *Play Sounds For GUI Actions* which toggles the sound effects on or off when selecting or navigating buttons. This can be navigated to with the joypad by using the joypad shoulder pads. Alternatively you can use a mouse or keyboard using the cursor keys and tab key. The tick box can be selected using the red button on the joypad or left mouse button or Return key.

There are three ways of outputting audio listed.

Rear Audio Socket: this is the default analogue audio output through the 3.5mm stereo audio output port on the rear of the A600GS.

HDMI Audio: this enables audio output through the HDMI connection to the television or monitor. Not all displays are compatible with HDMI audio or have the capability for playing audio.

Bluetooth Audio: if Bluetooth is enabled in the *Bluetooth Preferences* and connected to a Bluetooth speaker then this option will also appear and can be activated as an audio output.

Once again these can be navigated to with the joypad by using the joypad shoulder pads. Alternatively you can use a mouse or keyboard using the cursor keys and tab key. The blue boxes next to each audio option can be selected using the red button on the joypad or left mouse button or Return key. Once selected it will turn orange to signify that that audio output is active.

Each individual audio output can be amended in volume levels.   There is an associated slider bar for every audio output. The volume can be adjusted by using the jpypad left/right direction buttons. The mouse can be used to select the circular icon in the slider bar, keep holding down the left mouse button and then drag the slider left and right to increase or decrease the volume.

Volume levels of the selected audio output can also be changed while running a software title in the *Pause Menu*.

Display Preferences

The display can be configured in the *Display Preferences* section. To open the screen, navigate to the *System* button on the left side of the screen and select it. Navigate to button named *Display...* and select it.

There are four options to choose from. Use the joypad up and down direction buttons to navigate and red button to toggle between options. Alternatively you can use a mouse or keyboard using the cursor keys and Return key.

Single Or Double Line Mode: Single Line Mode displays interlaced screens with a the customary flicker. Double Line Mode removes the flicker so the image is stable.   There maybe a graphical performance slow down when using a Double Line Mode.

Display With Scanlines: when running a software title and this option is enabled, horizontal scanlines are overlaid across the screen. This simulates the look of a traditional CRT monitor for a more authentic retro experience.

Display Correct Aspect Ratio: the two options to choose from are *Display Stretches To Fill Screen* and *Display Use Authentic Aspect Ratio*. Using this function the black borders can be eliminated and the software title screen can be stretched to occupy any black border sections.

Display Status LEDs: when enabled this displays an information bar across the bottom of the screen when running a software title.

This bar displays a representation of the power, floppy disk drive and hard drive LEDs.   The drive lights will flicker when data is accessed on the respective drives. The power LED will flash when a software failure has occurred.

The information bar also shows other data such as the Frames Per Second (FPS). The FPS is the rate that the screen is rendering. A higher value represents a faster redraw of the screen.   Ideally games should render around 50 FPS for optimal performance.

Network Preferences

Internet connectivity is configured in the *Network Preferences* section. To open the screen, navigate to the S*ystem* button on the left side of the screen and select it. Navigate to *Network...* button and select it.

The available connectivity options are selected by two buttons:

• *New Wifi Connection*:

Select this option to connect to a wireless network.

Enter a name into the *Connection Name* text entry box that describes the network you are connecting to.

As soon as the SSID text entry box is activated a list of the available local networks will be displayed. The list can be navigated and when your network has been found it can be selected.

Enter the case sensitive password to access the wireless network into the *Password* text entry box.

For most cases, it is best to not change the *IP4* or *IP6* boxes from their Auto (DHCP) options.   The system will automatically negotiate an IP address. Change this option to *Manual* to use a static IP address

• *New Wired Connection*:

Select this option to connect to a wired network using Ethernet/RJ45.

Enter a name into the *Connection Name* text entry box that describes the network you are connecting to.

For most cases, it is best to not change the *IP4* or *IP6* boxes from their Auto (DHCP) options.   The system will automatically negotiate an IP address. Change this option to *Manual* to use a static IP address*.*

To commit the changes temporarily select *Use* button. The *Save* button stores the network configuration after a system reboot. To exit and loose any changes made select the *Cancel* button.

Select *Connect* button next to a listed network configuration to connect to that network and *Disconnect* button to disconnect.

Select the Trashcan icon next to a network configuration to delete it.

Select the Edit icon next to a network configuration to edit it.

Bluetooth Preferences

Bluetooth connectivity is configured in the *Bluetooth Preferences* section. To open the screen, navigate to the S*ystem* button on the left side of the screen and select it. Navigate to *Bluetooth...* button and select it.

There are three tick box options to navigate:

• *Enable Bluetooth System*: This controls whether Bluetooth initialises the system drivers on startup. Disabling it has the benefit of reducing the system's background resources.

• *Activate on StartUp / On Demand*:   This controls whether Bluetooth initialises on boot or when required by the system.

• *Activate Bluetooth*:   This option can be used to cycle Bluetooth on/off

The *Search For Bluetooth Devices* button will initiate a scan for local available devices.

Available Devices list is the updating list of Bluetooth devices within a close proximity of the *A600GS*. Select the highlighted *Searching For Bluetooth Devices...* button to halt the search.

A Bluetooth speaker or headphones can be paired with the *A600GS* as an alternative audio output.

A Bluetooth joypad or joystick can also be paired as an additional gaming controller.

Put the Bluetooth device you wish to pair with in *Pair Mode*. The device will then be displayed in the *Available Devices* list. Select the *Pair* button next to the Bluetooth device that you wish to pair with. Once it is successfully paired with the *A600GS*, select the *Connect* button to be able to use the device.

Please refer to the *Audio Preferences* section on how to use a paired and connected Bluetooth speaker as the default audio output.

Please refer to the *Controller Preferences* section on how to use a paired and connected Bluetooth joypad/joystick as the default game controller.

Controller Preferences

Joypads, joysticks and mice are configured in the *Controller Preferences* section. To open the screen, navigate to the S*ystem* button on the left side of the screen and select it. Navigate to *Controller...* button and select it.
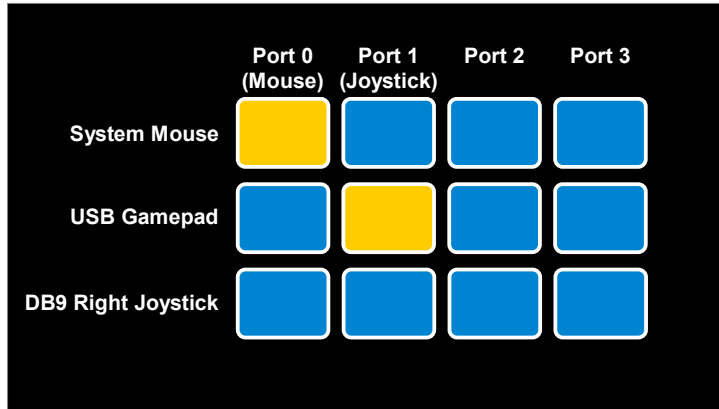
Controller Preferences

The *Controller Preferences* are configured using an array of buttons. Each one can be toggled active or deactivated.

The *A600GS* supports up to four game ports. The majority of classic games use *Port 0 (Mouse)* and *Port 1 (Joystick)*. The ports are listed across the top of the button array.

The active game controllers are listed down the left. These can be assigned to one of the four ports by selecting the button so it becomes illuminated.

The left and right 9-pin Classic game ports are not listed by default. To activate them simply plug in a game controller and double hit the fire button in succession. A tone will sound to signify that port is now activated and it will be listed in the *Controller Preferences* list, ready for configuration.

Language And Keyboard Preferences

The default language and keyboard layout are set in the *Language And Keyboard Preferences* section. To open the screen, navigate to the S*ystem* button on the left side of the screen and select it. Navigate to *Language/Keyboard...* button and select it.

There are four options displayed:

• *Language:* this option sets the default system language.

• *Keyboard Model:* the make and model of the keyboard connected can be specified for better compatibilty.

• *Keyboard Layout:* this option sets the layout of the keys according to the language/country selected.

• *Use On Screen Keyboard:* the virtual keyboard can be configured to be displayed only when a real keyboard is not connected. Alternatively it can be set to *Never* appear on screen or *Always* appear even if a real keyboard is present.

Shut Down / Restart

The A600GS can be shut down by navigating to the S*hut Down / Restart* button on the bottom left side of the screen and selecting it.

Two buttons are shown with the options:

• *Power down the A600GS*: this will shut down the system. Always use this option to safely shut down the A600GS before pressing the USB-C cable power switch off. If you do not then there is a risk of the filesystem becoming corrupt.

• *Restart the A600GS*: this will close all programs and restart the system. Once it has reloaded the main title screen will be shown.

The Opening Screen

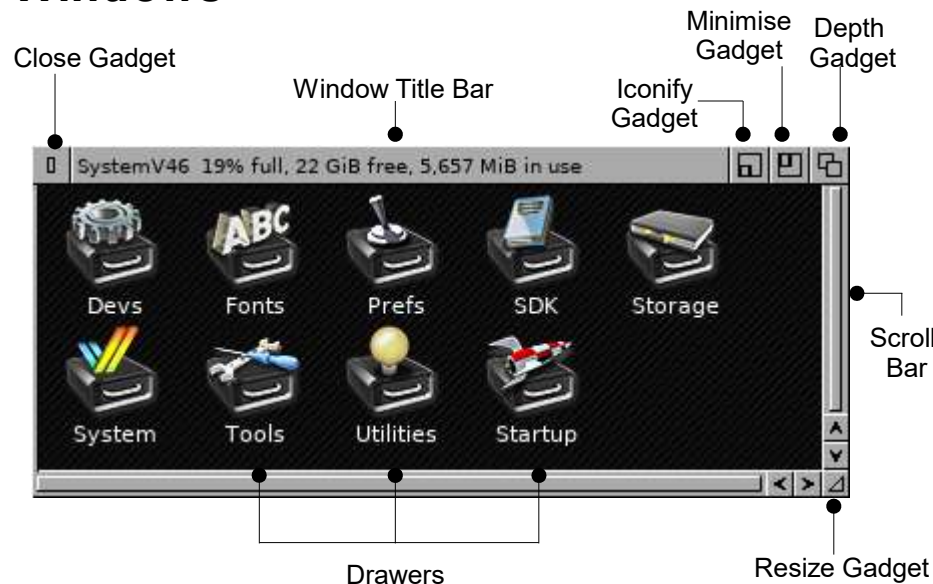When AmiBench has finished booting, the following screen is displayed:

Windows

Close Gadget

Window Title Bar

Iconify Gadget

Minimise Gadget

Depth Gadget

Scroll Bar

Drawers

Resize Gadget
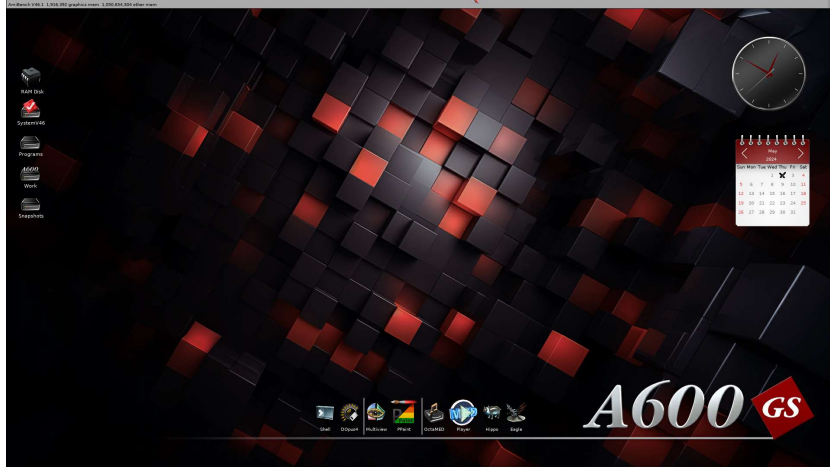
Volumes

AmiBench is split into various Volumes depicted by drive icons usually arranged in a column on the left side of screen.

Each volume can be opened by moving the AmiBench pointer over the the icon and then double clicking with the left mouse button.

The *RAM Disk* volume (`RAM:`) is an area of the A600GS memory that is setup as a file storage device like a disk. Files and directories can be copied to RAM: for temporary storage. The *RAM Disk* serves as a work area that the system can quickly access. Applications commonly use RAM: to store temporary files. Be careful when using `RAM:` for storing important files. If the A600GS looses power, has a software failure or AmiBench needs to reboot, the contents of the *RAM Disk* are lost.

The *SystemV46* volume (`SYS:`) contains all the necessary system files needed to boot AmiBench. The files are also required by most programs that run on AmiBench.

The *Programs* volume contains Graphics, Sound and Utilities applications. OctaMED, Personal Paint and Directory Opus are installed in this volume.

The *Work* volume contains user's personal content such as images, documents and music. These are generated from applications such as paint packages, image editing packages, music editors, text editors and word processors. The volume can also store content such as third party games, music, images and documents, either downloaded or copied across to the system.

Drawers

When SystemV46 volume contains a number of drawers that contain essential system and utility files.

Double clicking on the SystemV46 drive icon will open the window containing these drawers:

• *Devs* - this drawer contains the device driver files for the devices that are currently active on the system.

• *Fonts* – this drawer contains the system fonts available to AmiBench and other programs.

• *Prefs* – the system settings are controlled by a selection of preferences programs stored in this drawer.

• *SDK* – this drawer contains the Software Development Kit for developers to write their own programs using AmiBench's gadgets, classes and libraries.

• *Storage*- this drawer contains file that are not currently in use but are retained for future use. These files can be stored and used in a range of other directories when required.

• *System*- this drawer contains programs that control system functions. Some offer access to accessory programs, such as DOS or scripting languages.

• *Tools* – this drawer contains numerous utility programs and commodities enhancing the functionality of AmiBench.

• *Utilities* - this drawer contains programs that are helpful and useful, but not necessary for working with AmiBench.

• *Startup* – any programs copied to this drawer will automatically start when AmiBench boots.   They can be disabled by either moving out of the Startup drawer or moving them into the Startup/Disabled drawer.

Datatypes

Datatypes are software files used by tools, utilities, editors, and applications. They are used to describe file formats to the system, such as picture files, sound files, and text files.

AmiBench uses an advanced datatype system based around AK-Datatypes.

The following default datatypes are included with the system software:

• AK-DEEP: true colour Interleaved Bitmap (ILBM)

• AK-GIF: Graphics Interchange Format (GIF)

• AK-ILBM: Interleaved Bitmap (ILBM) files with indexed colours.

• AK-JFIF: Joint Photographic Experts Group (JPEG)

• AK-PNG: Portable Network Graphics (PNG)

• AK-TIFF: Tagged Image File Format (TIFF)

Datatypes Preferences

The system datatypes can be configured by using the Datatypes Preferences program found in the Prefs drawer. There are various rendering options applicable to selected datatypes such as quantisation, transparency, scaling, animation loading and upsampling. Setting the best rendering options will increase the quality of displayed images on screen. It will also increase the time the system takes to display images.

Adding Third Party Datatypes

Datatypes are a modular, expandable system. This flexible design gives provision for when new future file formats are developed. AmiBench can recognise further types of datafiles by installing third party datatypes. This involves copying the third party datatype to two locations in the *Devs/Datatypes* drawer and also the *Classes/Datatypes* drawer. The newly introduced datatype is then activated by rebooting AmiBench or running the DOS command *AddDatatypes* in a system *Shell* window.

Utilities

Clock

The *Clock* utility shows current system time on the AmiBench desktop.

It's appearance can be themed with skins. There are differing sizes of skins and shapes of the clock face.

Select the *Clock* by moving mouse pointer over the clock face and press the left mouse. Holding down the right mouse button will reveal the utility's *Settings* menu.

The clock face can be moved (dragged) around by holding down the left mouse button while the pointer is over the clock face and then moving the mouse. Releasing the left mouse button drops the clock into place. It can also be locked so it is immovable and anchored to a set position on the AmiBench desktop.

The seconds hand can be toggled on/off.

Calendar
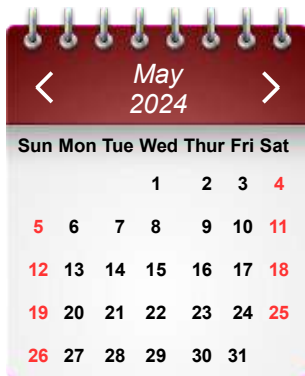
The *Calendar* utility displays the current system day and month on the AmiBench desktop.

It's appearance can be themed with skins.

Moving the mouse pointer over the left and right arrows and selecting them cycles through the months and years.

Select the *Calendar* by moving mouse pointer over it and press the left mouse. Holding down the right mouse button will reveal the utility's *Settings* menu.

The calendar can be dragged around the AmiBench desktop. It can also be locked so it is immovable.

Utilities

Dock

The array of icons across the bottom of the screen is the system dock. These icons are presented there as shortcuts to run the applications or utilities or system programs.

Moving the mouse pointer over the dock icon will highlight it. When highlighted, pressing the left mouse button will start the program.

The dock can be configured by the user to add/remove the most commonly used shortcut icons.

Separator bars divide related dock icons into categories.
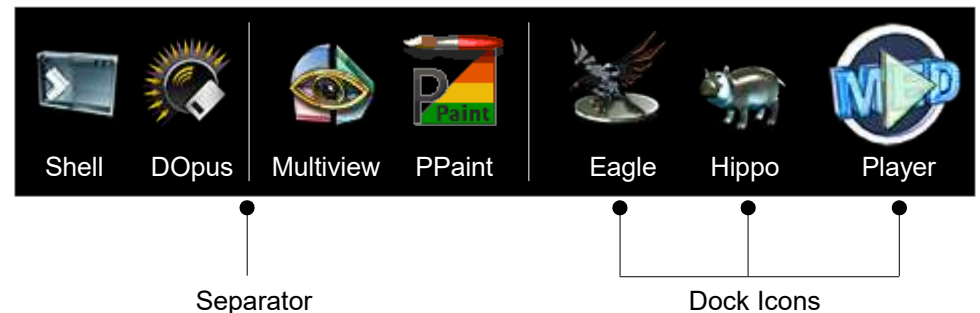
Select the dock by moving mouse pointer over an area on the dock without an icon and press the left mouse. Holding down the right mouse button will reveal the utility's settings pop-up menu. New icons can be added to the dock with the *Add Item...* option.

If the mouse pointer is hovering over a dock icon it will highlight. If the dock is selected (made active) at the same time and the right mouse button is pressed then a pop up menu will appear. This menu is specific for the icon that is currently highlighted. The options of *Remove*, *Replace*, *Move* and *Information...* can be selected for that icon.

To preserve any changes made select the *Save Config* option.

Overview

AmiSphere is a convenient Internet based service for file downloads and system updates. *AmiSphere* is integrated into the A600GS and clients exist for A-EON Technology computer platforms such as the X1000, X5000 and A1222+. *AmiStore* App Store and *AmiBench Updater* use the *AmiSphere* login credentials.

AmiSphere accounts can be administered on `www.amisphere.com`

Login

To access the *AmiSphere* service, ensure the A600GS is online. Refer to the *Getting Started- Network Preferences* section to setup internet connectivity. Navigate to the *AmiSphere Profile* button on the left side of the screen and select it. Either use the joypad shoulder buttons, tab key on keyboard or select with mouse to navigate between the *Username* and *Password* boxes.

The *Username* will be eight characters long in the format such as `as123456` and this is assigned on registration. If you already registered with *AmiSphere* for other A-EON Technology products there is no need to register again- simply use your existing username and password credentials.

The *Password* entry box is obscured by default when it is entered. It can be revealed on screen by selecting the *Show Password* button. This is useful for verifying the password is correct. Ensure no one is looking over your shoulder when you are displaying your password on screen using this option.

Your login and password details can be preserved by selecting the *Save AmiSphere Credentials* option This is helpful if you do not wish to enter these details every time you wish to login.

When the *Login Automatically On Start Up* option is selected then *AmiSphere* access will be initiated as soon as the system boots.

On successful login your user details are displayed along with three buttons:

• *Check Update*: selecting this will check with the *AmiSphere* server for the latest system software version available.

• *Install Update*: if a new version is available, it can be downloaded and installed by selecting this option. **Important: do not switch off the system while an update is downloading and installing**.

• *Logout*: log out of your *AmiSphere* account on this system.

User Account Registration

New *AmiSphere* accounts can be easily created. To access the *AmiSphere* service, ensure the A600GS is online. Refer to the *Getting Started- Network Preferences* section to setup internet connectivity. Navigate and select *Create Account* button on left side of the screen.

A new screen titled *Create A New AmiSphere Account* is shown with five mandatory text boxes to be completed:

• *First Name*: enter the user's first name

• *Last Name*: enter the user's surname

• *Nick Name*: enter a nick name for the user.

• *Email*: the user's email address.

• *Password*: the user's password.

The obscured password can be revealed on screen by selecting the *Show Password* button This is useful for verifying the password is correct. However ensure no one is looking over your shoulder when you are displaying your password on screen using this option.

Select the *Accept terms and conditions* tick box and then click *Register Account* button to create an account.

If account registration is successful, a user name will be returned which is eight characters long in the format such as `as123456`.

Product Registration

A new screen titled *Register Product* offers two options:

• *Register A600GS*: register the A600GS serial key with *AmiSphere* for free downloads of future system updates.

• *Register Other Product*: register software product serial keys with *AmiSphere* for free downloads of future updates.

The *Product Key* box accepts a valid product serial key code. Please note that keys are case sensitive.

Selecting the *Register Product* button will validate and register the product on the *AmiSphere* server. It will be permanently recorded as a product linked with your user account.