GCW Help
Game Controller Wedge Description

By Jim Luther

GCW is a tool for creating and executing macros that are triggered by pressing game controller buttons. It is very much like **Joy2Key** or **XPadder**. Type a macro into a text field, and you are ready to try it.

You can compose up to 12 macros that you can save as a “profile” that you name. You can create as many profiles as you like.

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Built in commands allow you to run programs, open folders and known file types, toggle through open windows, open active windows, and change profiles,

GCW is based on Autohotkey V1.1. The well known Autohotkey (AHK) scripting tool offers means for emulating keyboard and mouse actions, interacting with windows, and much more. It is frequently used to automate repetitive computer tasks.

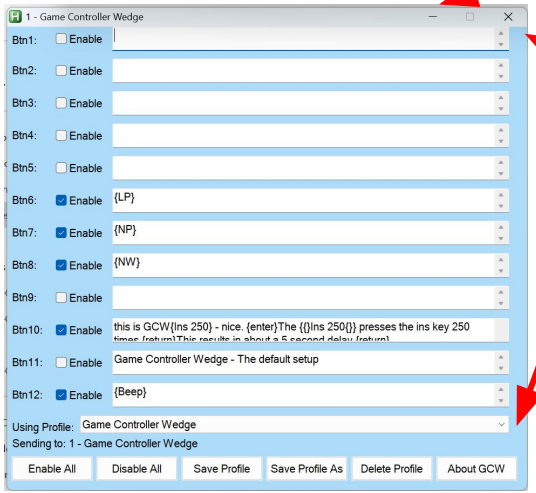
Please keep all the materials in the GCW folder together - if you don’t, you will experience a ton of error messages

Table of Contents:

Why use game controller buttons to launch macros?

Because game controller buttons are unlikely to cause things to happen in typical Windows applications - other than games.

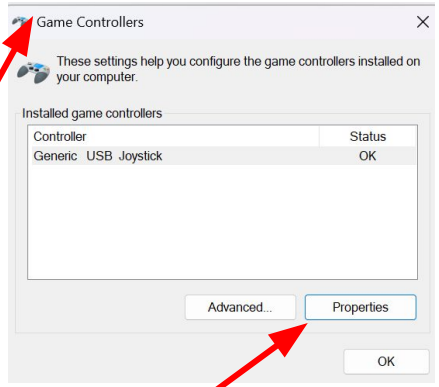
GCW Windows:

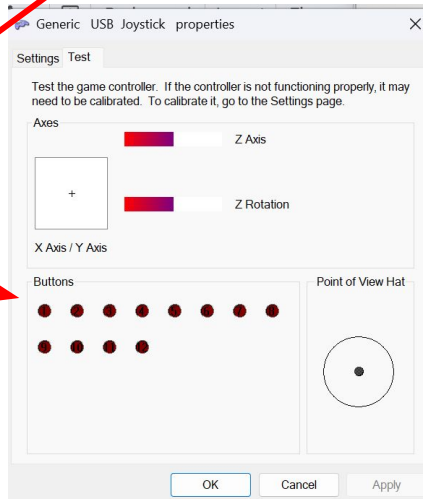


This is the main **GCW** window where you define your macros, or issue commands.

GCW supports up to 12 macros you define which are triggered by joystick or gamepad buttons 1 through 12.

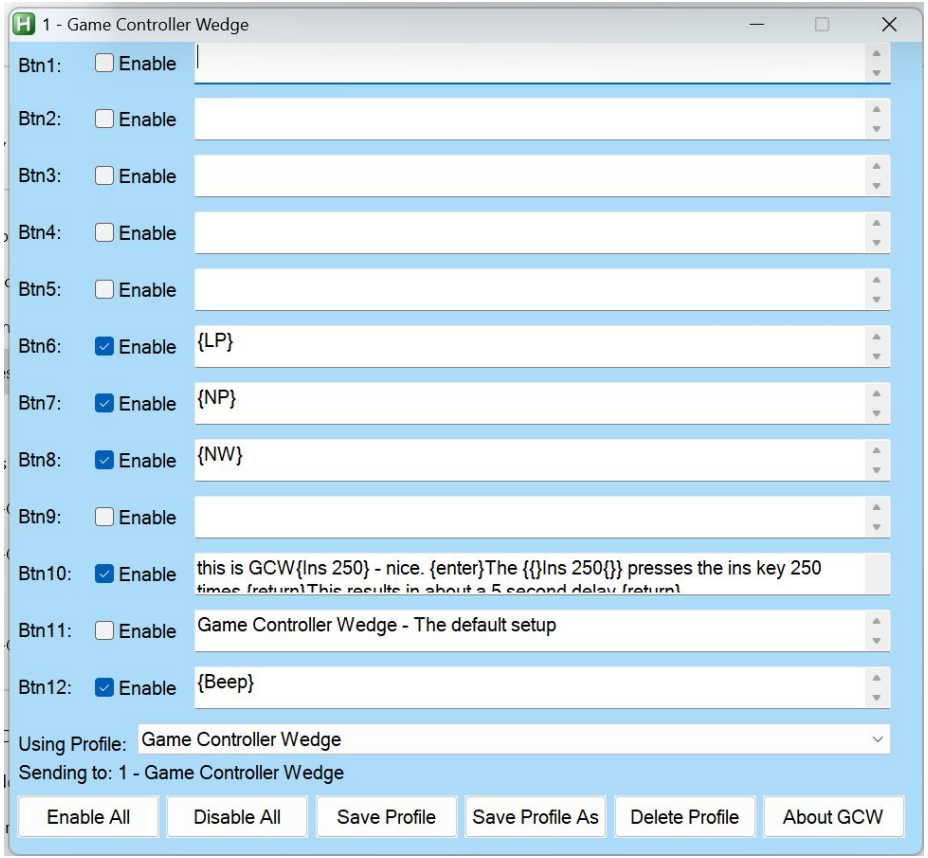
Use the **Game Controller Control Panel** in Windows to see how your game controller buttons are mapped. You can see those details and test your buttons in the **Properties** view





This smaller **Test Joy Buttons** window lets you test your macros/commands without a game controller. This window, when open, sits on top of other windows.

More



More about the GCW Windows

You can enable/disable any or all game controller buttons for this profile using the **Enable** check boxes, or the **Enable/Disable All** buttons
Use a disabled macro to describe what a profile does!

You can save changes you make with the **Save Profile** button. ***Be sure to Save any changes before loading a new profile or exiting GCW***

You can create a new profile with the **Save Profile As** button.

You can remove an entire profile with the **Delete Profile** button - except the default **Game Controller Wedge** profile

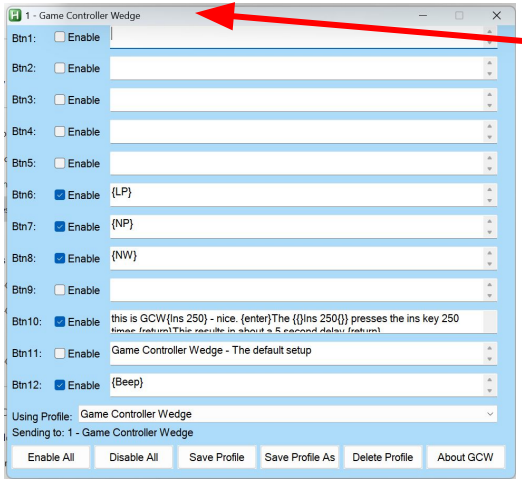
You can select any profile from the **Using Profile** drop down menu, or via the {GP} Special Command

The **Sending To:** label (most times) shows the title of the application window that will receive your macros

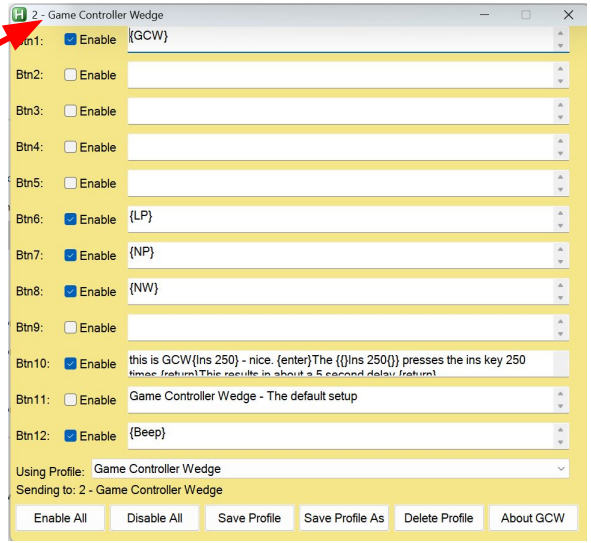
About GCW opens this help file

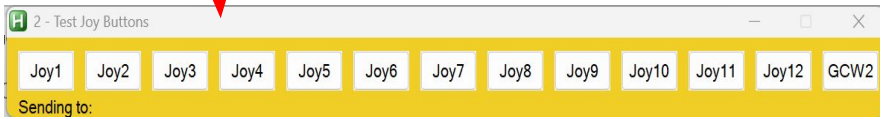
The **GCW** button shows the main GCW window

And now there are 2 GCWs: one for Controller 1, and one for Controller 2



Controller 1's settings and test buttons are in blue windows as shown here on the left.
Controller 2's settings and test buttons are in yellow as shown in the right. Also note that the yellow settings window title says "2 - Game Controller Wedge", and the yellow test button window says "2 - Test Joy Buttons".
Each version of GCW maintains separate settings files: gcw.ini and gcw2.ini. Please keep all the GCW files together in the same folder.





Launch GCW.exe or GCW.ahk for Controller 1
Launch GCW2.exe or GCW2.ahk for Controller 2
The exe versions, GCW.exe and GCW2.exe, have blue and yellow icons respectively.

Anatomy of a macro

GCW uses AutoHotkey and requires that you adhere to the AutoHotkey conventions for the Send command (at AHK site)

An Example**: ^p{return}**

This example opens the print dialog using the Ctrl-p key combo in many programs, followed by the Enter key. You can also use **{enter}** for the Enter key

Pressing and holding the Control key for the key that follows is denoted by the **^** character.
Special characters like tab, space (at the end of a macro), backspace all need to be enclosed in braces as in: **{left}** for left arrow. Or, **{F11}** for the F11 key.(See more about special characters here at the AHK site)

Here is the list of special modifier keys: (More about modifier keys here at the AHK site)

= Windows key
! = Alt
^ = Control
+ = Shift

You can combine modifiers as in: **^!{down}** which reads as Ctrl-Alt-(down arrow). *This combo may turn your display upside down on some Windows computers!* **^!{up}** can restore your display.

More

More macro examples

A name and address fill in: **Fred{tab}Flintstone{tab}345 Cave Stone Rd.{tab}Bedrock{tab}NY{tab}123456{enter}**

You can press a key multiple times by adding a number to the special character: **{tab 3}** (3 tabs)
Use the insert key to create around a 3 second delay: **Now{ins 150} Later** (There is also a {SLEEP} command covered in the next section.)
GCW sends keys faster than you can type, so delays may help a program to catch up to your macro.

Click at particular screen coordinates: **{click 150, 600}**
To help you to determine your cursor position, GCW has a built-in hotkey sequence: **Alt-m** opens a tooltip note with the coordinates. Use **Ctrl-Alt-m** to hide the tooltip note

Raise the volume a little bit: **{volume_up}**

Select the browser back button: **{browser_back}**

Again, much more about what you can send can be found here at the AHK site

Special Commands

In addition to the standard AHK special characters, GCW offers its own special commands

{R} invokes the AHK Run command. The **{R}** command can open websites, programs, known file types and folders as long as you follow the **{R}** with a correct file path, or URL. Try this example: {**R**}**https://duckduckgo.com/**

{LW} - Displays a list of open windows.

{NW} - Brings the next open window into the foreground - ready to receive macros. This works, but not always in the order you expect or hope for.

{LP} - Displays a list of your profiles.

{NP} - Loads the next profile on your list.

{TJB} - Opens the **Test Joy Buttons** window if it was dismissed or minimized

{GCW} - Brings the main **GCW** window into the foreground

More Special Commands

In addition to the standard AHK special characters, GCW offers its own special commands

{SLEEP} - Allows you to pause GCW activity to allow for programs to open, and other processes to complete before reactivating GCW to continue sending macro text or commands. To do this, follow the {SLEEP} command with a number representing milliseconds. So, **{SLEEP}5000** would pause GCW activities for 5 seconds.

{AW} - Activate an open window. This command allows you to jump to a window based on any text that appears in the title bar of a window. To do this follow the {AW} command with some text that matches text in the window title. The text does not have to be the complete title, just any part of it. For example, **{AW}Calc** will activate the Calculator app (if it was open). Just be sure that the title is unique to the window you hope to activate.

{GP} - Load a named profile where the exact profile name appears directly after the {GP} command. For example, {**GP}Game Controller Wedge** will load the default profile. You could use this command to make a table of contents profile that links to your most commonly used profiles.

{BEEP} - Makes a short toot sound.

{S} - Suspend other GCW buttons until the macro for this button has finished. Place this special command at the beginning of your macro and it will prevent other macros from executing concurrently.

Combining Commands and Macro Strings!

You can *combine special commands and macro strings in any of the 12 macro slots* by separating the commands and/or macros with the pipe character: **|**

Commands and macro strings can be combined in any order, and you can include as many as you want (I really don't know for sure what the limit is.) The actions will be carried out in left to right order, triggered by a single button press.

For example:

{S}|{R}Calc|{SLEEP}1000|{AW}Calc|55{+}66{enter}

This combo macro: First, it prevents other macros from interfering with this one. Then opens the Calculator app, waits 1 second, makes sure the calculator window is active, and finally requests the result of 55 + 66. *Note that the + sign has to be enclosed in braces because it is also a special modifier character.*

Limitations / Contact

GCW and AutoHotkey can emulate keyboard and mouse actions and send them to ***most*** active windows, or the Windows operating system. But there are applications that it will not be able to interact with at all, or not very well.

In particular, in Windows 11 the new Notepad behaves really weirdly. If you send text to it, it will frequently miss some of the sent characters. This is a quirk in Notepad I believe is related to the AI functions it now offers. You can download any one of the many Notepad alternatives to test your GCW macros. Also, I was unable to use the {click} command to reactivate Voice Access in Windows 11. You can find out more here if you are having issues controlling or sending something to a window with GCW.

You can **contact me** at: j a m j o l u @ g m a i l . c o m (remove the spaces) and I will attempt to suggest a solution or workaround. I also welcome comments or suggestions.

Where can I get a gamepad with 12 buttons or 12 - 3.5mm inputs?

1. Many USB gamepads available on Amazon will have at least 10 buttons. This wireless one looks like it has at least 12 for around $25: **8BitDo Ultimate 2C Wireless Controller**
2. **The XBox Adaptive Controller** - 19 - 3.5 mm inputs, remappable, $100 - Also available at Best Buy, Target…
3. **Sehawei Haute42 16 Key All-Button Arcade Controller**, buttons only, $48, Amazon
4. **Haute42 Leverless Controller Arcade Stick**, similar to #3 with a small display, $53, Amazon
5. **Videochars Arcade Stick 16 Keys All-Button Game**, similar to #3, no display, $59, Amazon
6. **Forest Joystick Mouse Hub** - A DIY or request someone to help you make it, 4 buttons?, $?, Makers Making Change

Amazon prices change all the time, so consider the above prices as approximate.

Item 2 is the well known XBox Adaptive Controller that comes with its own remapping app to assign gamepad buttons of any of the 3.5mm inputs. The inputs are standard for common ability switches like the Ablenet Jelly Bean or the Orby Switch

Items 3,4,5 look like they are based on the same or similar hardware. They all use swappable keyboard type keys for buttons, but no inputs for 3.5mm ability switches.

Item 6 - is a DIY project on the Makers Making Change website: https://www.makersmakingchange.com/s/

I have to admit that I have not tried any of them.