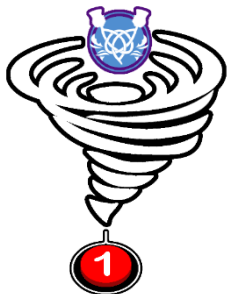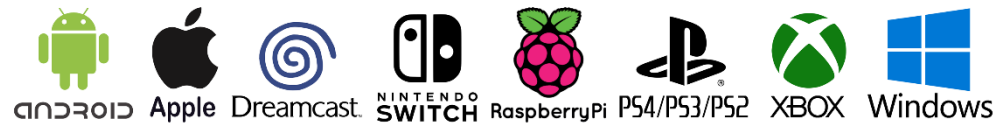# GAME CONTROL MIXER GCM XAC nov.2023

Accessible game control mixing for PC, PS3, PS4, Xbox, Nintendo Switch and more. By oneswitch.org.uk and celticmagic.org

NINTENDO SWITCH

CNDROID Apple Dreamcast NINTENDO SWITCH RaspberryPi PS4/PS3/PS2 XBOX Windows

OUTPUT (TO GAMES MACHINE)

PROG (OPTIONAL)

TITAN

3

O
P
B
A

OUTPUT - use short USB cable to connect to your games machine. Green "**O**" LED = good connection. See HELP section.

PROG - link to a Windows PC for **KMG** Capture. Use to mix in speech and other controls. Green "**P**" LED = good connection.

↑ ↓ - Titan buttons change slot display. **1**= Mouse , **2**= Xbox 360, **3**= AUTO/Xbox One, **4**=PS4, **5**=Switch. **6-9** Custom.

A / B - connect XAC and/or gamepads. Green LEDs = good connection. Use ⌻ button or switch as **SHIFT**.

SHIFT - used with a single stick can reach all controls. Read on...

①

1. Titan SLOTS, XAC and SHIFT

SHIFT = 🔲 - tap, or hold with buttons and joysticks for extra control (or use gamepad ▬ button)
use TITAN ↑↓ buttons to change SLOT

SLOT 1 = MOUSE

L-STICK/R-STICK = move/move slow   (A) = left-click   (B) = right-click   (X) = axis-lock   (Y) = drag
LS = change speed   **RT/ZR** = double-click
D-PAD = cursor keys   **LT/ZL** = enter key   ≡ tapped = ALT+F4, or held = ESCAPE
SHIFT TO SLOT 2 = tap SHIFT x 6
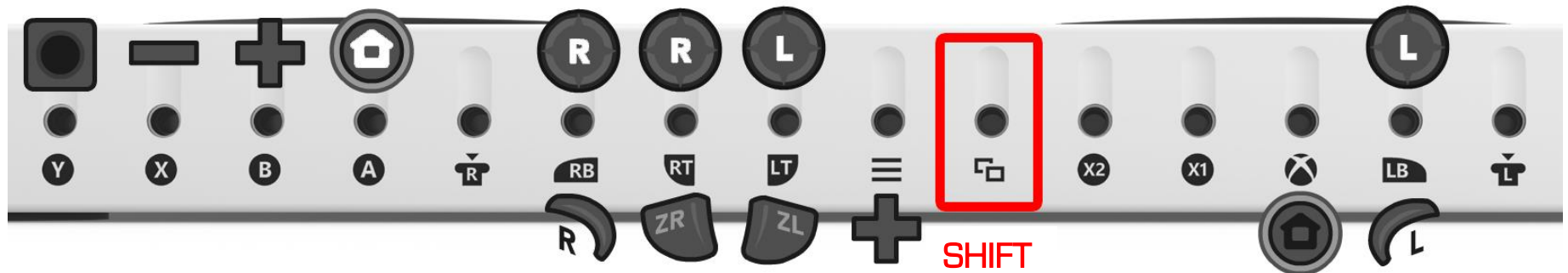
SLOT 5 = Nintendo Switch

SHIFT SLOT = See joystick mode N6. **SHIFT**

SHIFTED =

SHIFT

HOLD SHIFT with A,B,X,Y for menu buttons, with L,ZL,R,ZR for thumb-stick buttons, or SHIFT + ≡ for ▬

TAP SHIFT   (B) x2)   (L) (x3)   (R) (x4)   (L)(R) (x5)

SLOT 2=PC   3=AUTO   4=PS4   5=SWITCH   6=XB1   7=AUTO (latched)   8=PS4 (latched)   0 = AUTO BASIC

2. GCM Joystick Modes

TITAN SLOT 5 NINTENDO SWITCH

SHIFT ⌗ + move stick ↑, →, ↓, ← x 1-6.
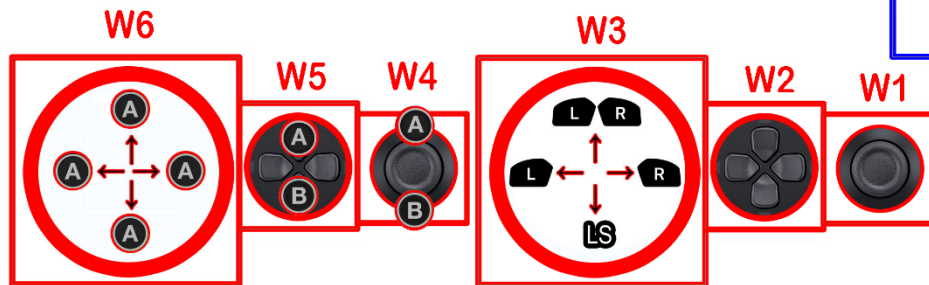Watch the Titan display. Release SHIFT to set. For example.
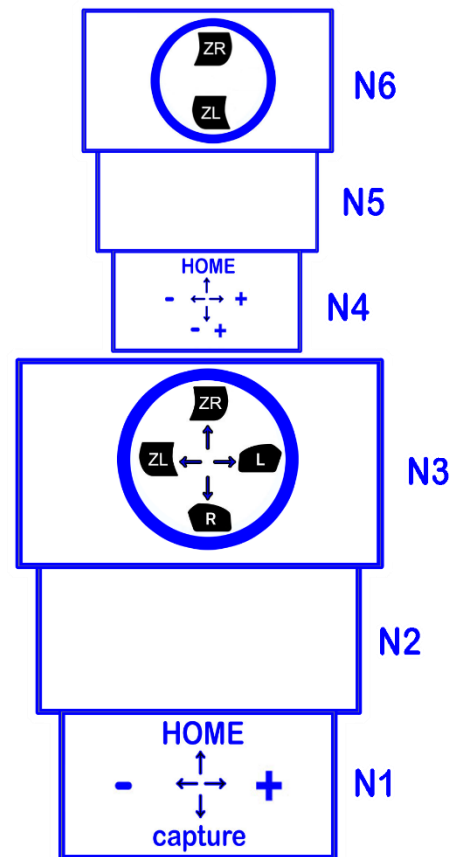
SHIFT + move stick ← x1 = W1 Left-stick.

SHIFT + move stick → x2 = E2 ABXY.
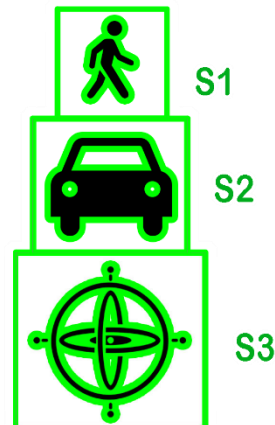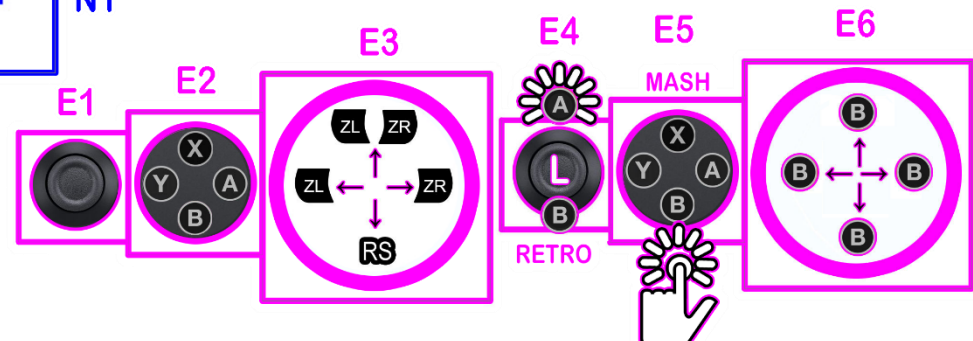The joystick will then behave as the ABXY buttons. Pull right for A. Pull down for B, etc.

↑ NORTH

N1 = Menu buttons
N2
N3 = Shoulder buttons
N4 = (Menu buttons for RetroPie)
N5
N6 = ZL / ZR

CHANGE SLOT: In N6, tap SHIFT x6, rotate stick to change slot number (1-8) and press A to select.

N6
N5
N4 — HOME
N3
N2
N1 — HOME / capture

→ EAST

E1 = Right-stick
E2 = ABXY
E3 = ZL, ZR, RS
E4 = RETRO (B button auto-fire)
E5 = MASH ABXY (hold for auto-fire)
E6 = B stick.

E1 E2 E3 E4 RETRO E5 MASH E6

W6 W5 W4 W3 W2 W1

← WEST

W1 = Left-stick
W2 = D-pad
W3 = L, R, LS
W4 = Left-stick left/right, A + B
W5 = D-pad left/right, A + B
W6 = A stick

S1
S2
S3

↓ SOUTH

S1 = Explorer. Explore 3D worlds.
   ← → = r-stick look left/right.   ↑ = walk forward.
   ↓ = back / look-up / back / look-down.
S2 = Driver (left/right/L2 and R2).
S3 = Motion 1
S4 = Basic Explorer. Simpler version of S1.
S5 = Drive Slow
S6 = Motion 2

NINTENDO SWITCH

3. KMG Capture: Mixing in Windows 10 controls

Keyboard, Mouse and Gamepad (KMG) controls can be "captured" from a Windows PC. Then apps, such as Voice Attack, can be added to your mix for the likes of speech control.

1. Add a high-quality micro-USB cable between your TITAN **PROG** socket and PC.

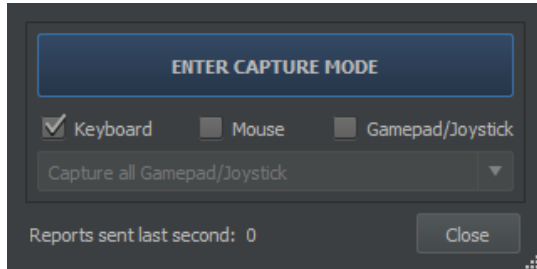2. Start the **GTuner IV utility** (free from consoletuner.com). Select a gaming slot (e.g. slot 2 for PC, RetroPie, or slot 3 for Xbox One). Press **F4** and with **Keyboard ticked**, click on "**ENTER CAPTURE MODE**".

3. Click on the Device Monitor tab and experiment with the keys below.

LEFT-STICK = CDEF (+G = 77%   +H = 56%   +GH = 33%).   **RIGHT-STICK** = IJKL (+M = 77%   +N = 56%   +MN = 33%)

ZL = R (+S = 77%   +T = 56%   +ST = 33%)   ZR = O (+P = 77%   +Q = 56%   +PQ = 33%)

MINUS = BACKSPACE + ENTER

ACCELEROMETER = ACCEL_1_X -100% = Number Pad 1   ACCEL_1_X +100% = 2   ACCEL_1_Y -100% = 3   ACCEL_1_Y +100% = 4.

GYRO = GYRO_1_X -100% = Number Pad 5   GYRO_1_X +100% = 6   GYRO_1_Y -100% = 7   GYRO_1_Y +100% = 8

Voice Attack speech commands

"SHIFT"

Start **Voice Attack**: Use the "**GCM Speech (Nintendo Switch)**" profile available from OneSwitch. Say "LISTEN TO ME" or "STOP LISTENING".
Start GTuner IV. Click "Device Monitor". Press F4. Tick "Keyboard". Start KMG Capture mode.

NINTENDO SWITCH

Description	Spoken Command
R	[Are ; Romeo]
RS	[Are Ess ; Right Stick Press]
ZR	[Zed Are ; Zulu Romeo]
D-PAD DOWN	[Dee Down ; D-Pad Down]
D-PAD LEFT	[Dee Left ; D-Pad Left]
D-PAD RIGHT	[Dee Right ; D-Pad Right]
D-PAD UP	[Dee Up ; D-Pad Up]
L	[Ell ; Lima]
LS	[Ell Ess ; Left Stick Press]
ZL	[Zed Ell ; Zulu Lima]
PLUS	[Plus]
NINTENDO	[Nintendo ; Home]
MINUS	[Minus]
B	[Bravo ; Bee]
A	[Alpha ; Ay]
X	[Ex Ray ; Ex]
Y	[Young ; Yankee ; Why]
L-STICK UP 33%	CRAWL
L-STICK UP 77%	JOG
L-STICK UP 100%	RUN
L-STICK UP 100% + RIGHT TRIGGER	SPRINT
L-STICK DOWN 77%	BACK UP
L-STICK UP 56%	WALK
SHIFT ON/OFF	SHIFT
STOP ALL COMMANDS	STOP IT
START VOICE ATTACK	[VOICE ATTACK ON; LISTEN TO ME]
STOP VOICE ATTACK	[VOICE ATTACK OFF; STOP LISTENING]

All Nintendo Switch commands are available.

Say "**SHIFT**" to latch ON/OFF (see GCM Joystick modes)

Gaming Example: For 3D exploration games that use the left-stick to move and right-stick to look, try setting your stick to E1 right-stick mode, and use:

"CRAWL" (33% left-stick up)
"WALK" (56%)
"JOG" (77%)
"RUN" (100%)
"SPRINT" (100% + RT)
"BACK-UP" to walk backwards
"STOP IT" to stop

This reduces the need to keep sustained pressure on a stick.

Get Voice Attack from voiceattack.com. Their help guides, and forum can support you build your own custom profiles for each game you need.

4. HELP

⊡ is also known as VIEW (Xbox One), Back (Xbox 360), Touch-click (PS4), Select (PS3), and Minus (Nintendo Switch).

Customisation options upon request include joystick sensitivity boosting, menu button blocking (for people likely to get lost in game menus), SHIFT latching (for those unable to SHIFT and move a stick at the same time), simplified joystick mode selection, and more.

HELP connecting to your games machine

PC: SLOT 2 for Xbox 360 controls, SLOT 3 (with XAC attached) for Xbox One controls, or SLOT 4 for PS4 controls. Gamepad optional.
PS5: SLOT 4. With the Sony Remote Play app (PC/PS4) requires a PS4 Dualshock. Direct connection requires a custom Cronus Zen. E-mail for help.
PS4: SLOT 4. PS4 gamepad essential. In PS4 menu, set **Setting > Devices> Controllers > Communication Method > "Use USB Cable option"**.
PS3: SLOT 3: Gamepad optional. Hold PLAYSTATION to set as controller 1 (joystick mode N1 and push UP).
Raspberry Pi: SLOT 2. Gamepad optional. In RetroPie use joystick mode N4 to quit most games.
Switch: SLOT 5. Use joycons to set **System Settings > Controllers and Sensors > Pro Controller Wired Communication ON**.

Xbox 360: SLOT 2: Xbox 360 hard-wired gamepad essential.
Xbox One/ S/X: SLOT 6: wired XAC or Xbox One compatible gamepad essential. See trouble shooting if having problems connecting.

Android: SLOT 1 for touch/mouse games. SLOT 2 or 4 for gamepad games. Requires an On-The-Go USB adapter. Limited.
Apple iOS: SLOT 1 for touch games (use touch assist mode in accessibility options). SLOT 4 for gamepad games (PS4 gamepad required). Requires an Apple USB 3.0 camera adapter with connected power supply (Apple iPad or quality 2A alternative). Limited.

Dreamcast: SLOT4. Gamepad optional. Brook PS4 to Dreamcast adapter with Raspberry Pi power supply attached to its "PC" socket. Connect Titan to Brook to Dreamcast. Brook adapter must be in green LED mode (hold for 5 seconds to set). VMU access limited to swapping to a standard controller.
Gamecube: SLOT 4. Gamepad optional. Raspberry Pi PSU/PC power to Titan PC PROG required. Also requires a Brook PS3/PS4 to PS2 adapter in XID mode, fully updated, into a PS2 to Gamecube adapter. Power up your Gamecube. Connect PC PROG to power, then connect what remains, leaving connection to the Gamecube (and optional gamepad) until last.
PS2: SLOT4. Gamepad optional. Requires a PS3/PS4 to PS2 Brook adapter (with up to date firmware).
Wii and Wii-U: SLOT 2. Maxgear Cross Fighter adapter with attached Wii-remote required. Start Wii/Wii-U (sync Wii-remote if needed). Press Wii-remote "A". Connect Maxgear adapter to back-of your Wii via USB to USB cable. Count to 10. Connect Titan Two to front of Maxgear adapter. A good connection is indicated by the Wiimote LED being on, and the T2 having a green LEDs for "O" and "B". Reconnect the T2 if not. Repeat if this fails.

Wireless pairing

Dualshock 4: Hold the Titan ↑ button until the display rolls, then hold SHARE and PS on the Dualshock until it flashes white fast.

XAC: To use your XAC wirelessly with the Titan, follow the guidance above, then pair your Titan and XAC: Hold the Titan ↑ button until the display rolls, turn your XAC on (hold the Xbox button), then press))). A steady white XAC Xbox light and steady Titan number display indicates a good connection.

TROUBLE SHOOTING

1. **Connection issues?** Follow HELP Connecting section for your machine. Only use the supplied short USB cable between the Titan OUTPUT socket and your games machine. Make sure cables are firmly connected. A tiny round red LED light suggests an error with that connection. **A U** means Authentication error. Check your controller is powered up. Check you are in the right SLOT for your games machine (try 3 if in doubt). Disconnect XAC then hold Xbox button until light goes out. Reconnect. Power down Xbox One controller or power off PS4 controller (press tiny button on back with paperclip). Try again from scratch.

2. **LED display issues?** The 7-segment number display can only do one thing at a time. If you change a SLOT it will display that. If you change a joystick mode, it will display that instead. If there are different problems with the number display, try turning off console vibration if available (especially on Nintendo Switch, PS3 and PS4).

3. **Co-Pilot issues?** The GCM XAC system treats all connected left-sticks as the same thing. Likewise, with right-sticks. If you need more control, consider using Xbox One co-pilot or upgrade to a GCM100 system.

4. **Titan firmware upgrade?** If upgrading Titan firmware (not recommended for GCM XAC use normally), remember to update the SD card by pressing the "Configure" button in GTuner IV.

5. **What games can I play?** See the GCM XAC page at OneSwitch.org.uk for a booklet of fantastic games possible to play with one stick and two buttons. If you can manage more controls, then many more games are possible.

N.B. Do not use extra power. Only use the supplied short USB Output cable.

For more help with your Game Control Mixer contact barrie.ellis@oneswitch.org.uk. The Game Control Mixer is a joint project with Celtic Magic. We are indebted to Jefferson Koppe (ConsoleTuner.com) and Scachi for their invaluable help. Thanks also to Francis Binnie of SpecialEffect for support with VoiceAttack profiles standards.

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