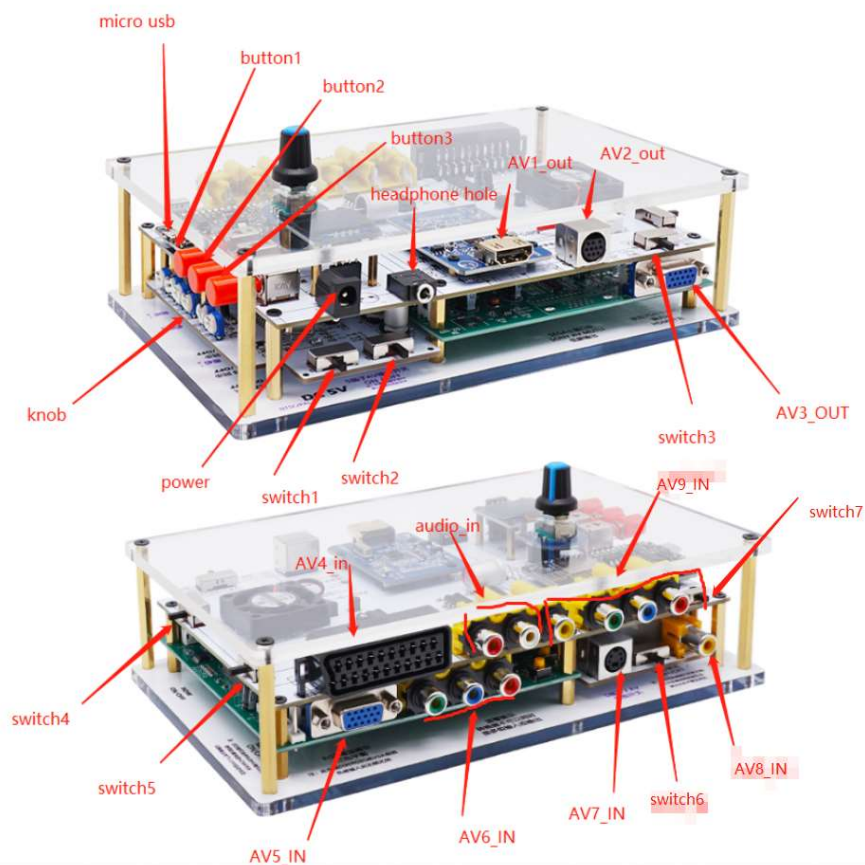# BUTTONS, CONNECTORS,AND EXTERNAL CONTROLS

Micro USB：

For updating the devices firmware， Please see "Firmware Updates Guide"

KNOB：

Mainly used to adjust the color and brightness of the picture

Button 1:

When connecting 480P RGBS signal, press the green sync switch.

Button 2:

When connecting RGBS signal,Turn on the RGBS sync switch

Button 3:

Toggles the power off and on

Power input：

Connect a suitable 5 volt, 2.1 x 5.5mm positive tip PSU supplying at least 1.5 amp of current.

audio out:

Standard 3.5mm stereo headphone plug type connector. Output high-fidelity audio.

AV1_out:

Output standard HDMI digital signal,

AV2_out:

Use saturn interface to output RGBS low-resolution signal (240P), suitable for color monitor TV

switch1:

Toggles console version NTSC and PAL ,When using S-video signal or AV signal input

switch2:

Toggles s-video/av ON and OFF

note:When not using svideo or av signal input, please turn off this module.

switch 3:

Analog black and white TV screen,The output video can be adjusted to monochrome image/colors image

AV3_out:

Standard D-Sub15 (VGA) connector. Minimum 480p video signal output

note：When using VGA output, please turn off HDMI

switch 4:

toggles the HDMI signal OFF and ON.

switch5:

Toggles Low resolution video signal ON and OFF

note: This function is used as RGBHV (VGA) to RGBS signal output, please turn off HDMI when using

Connect an PAL RGB SCART source to this input.

note：The input must be an RGB or YPbPr signal. S-Video and Composite SCART sources are NOT supported and require transcoding into RGB first. Only European specification RGB SCART cables are supported. The less common Japanese JP21 cable must be used with a converter.

AV5 IN:

Standard D-Sub15 (VGA) connector，You can connect sources such as the Sega Dreamcast , retro gaming or PC，The highest can only handle 480P video signal, 720P/960P/1080P will be directly converted to HDMI signal output.

AV6 IN:

Connect a component source to this input ,please turn off the RGBS sync.

Audio IN:

Left and right audio input for connecting rgbs signal and component signal.

AV7 in:

Connect an S-video source to this input.

Av8 IN：

Connect an AV source to this input

AV9 In:

Connect an RGBS source to this input
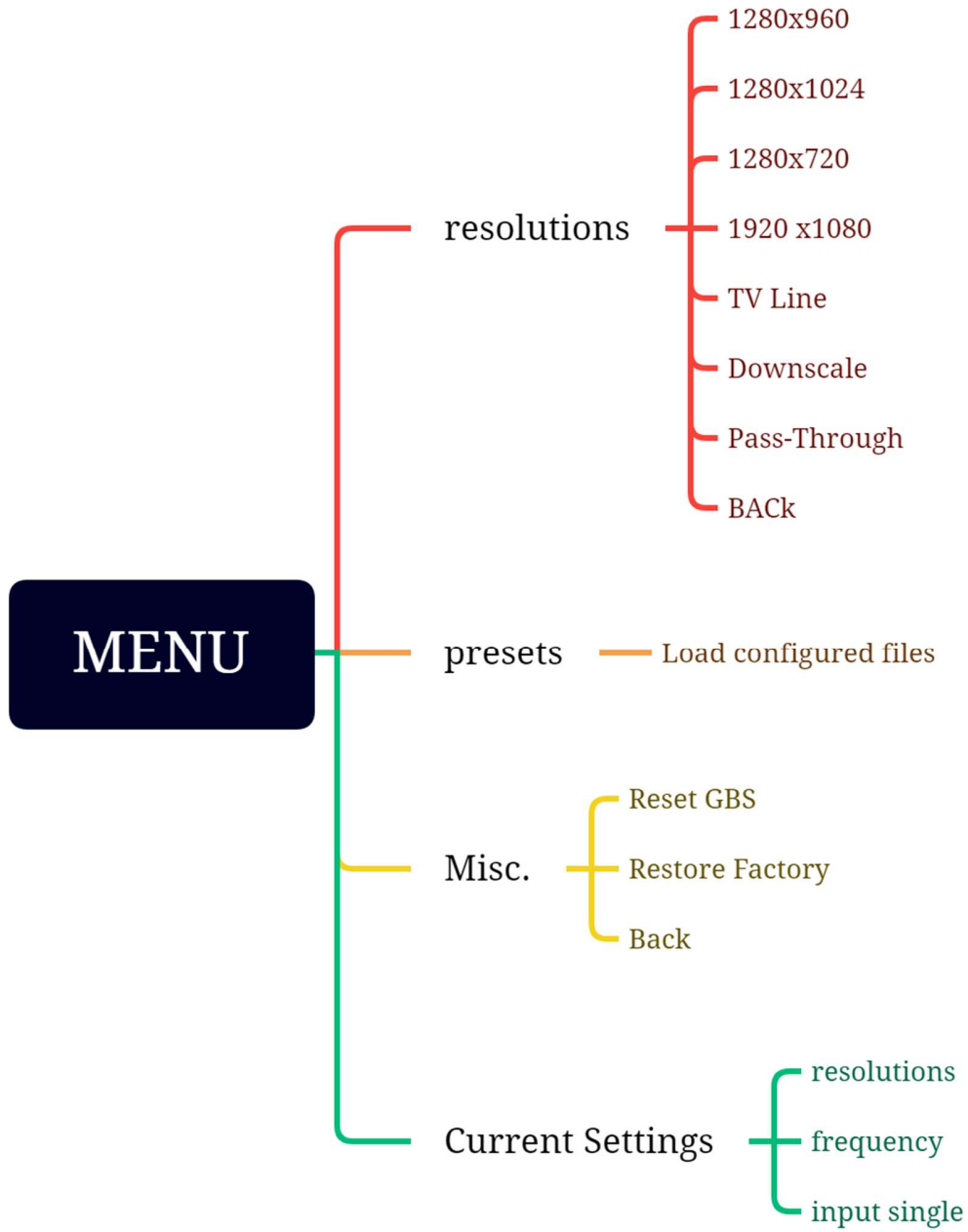
switch6：

Toggles the S-video signal and AV signal

switch7:

Toggles compatibility mode ON and OFF

note:The neo aes console needs to enable this function, and then restart GBSC to take effect, other consoles do not need to enable.

rotary encoder& LCD：

actions： Press down to confirm, and turn the control to select the cursor in the forward and reverse direction

MENU

- **resolutions**
  - 1280x960
  - 1280x1024
  - 1280x720
  - 1920 x1080
  - TV Line
  - Downscale
  - Pass-Through
  - BACk
- **presets**
  - Load configured files
- **Misc.**
  - Reset GBS
  - Restore Factory
  - Back
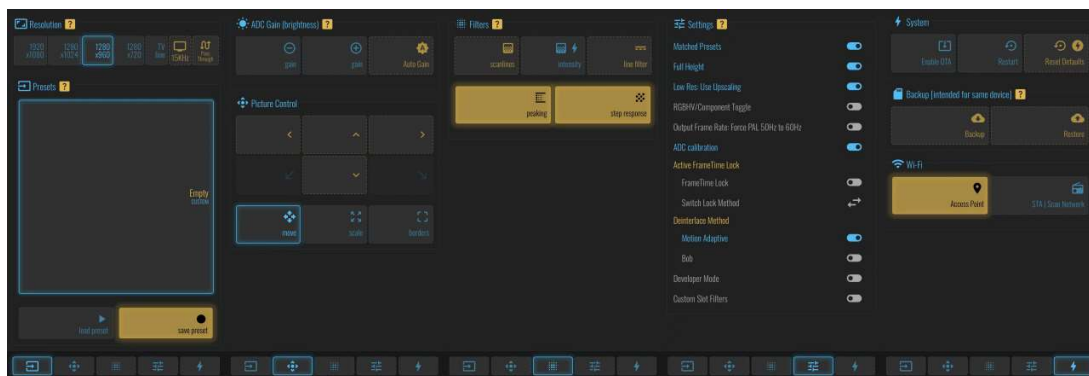- **Current Settings**
  - resolutions
  - frequency
  - input single

MENU

Log in:

 STEP1: Search for WIFI through phone or PC.

WifiName: gbscontrol
Password: qqqqqqqq

STEP2:Enter IP (192.168.4.1) or URL (http://gbscontrol) in the browser address bar
to enter the settings （six pages）

First page:

Resolution ❓

1920 x1080	1280 x1024	1280 x960	1280 x720	TV line	15KHz	Pass Through

Presets ❓

Empty
CUSTOM

▶ load preset

● save preset

Resolution:

- Your selection will also be used for startup.1280x960 is recommendedfor NTSC sources.1280x1024 for PAL

- Use the "Matched Presets" option to switch between the two automatically (Preferences tab)

- Choose an output resolution from these presets

Presets：

- lf you want to save your customizations, first select a slot for your new preset, then save to or load from that slot.

- Selecting a slot also makes it the new startup preset

The second page:

ADC Gain (brightness) ?

| ⊖ gain | ⊕ gain | Ⓐ Auto Gain |

Picture Control

| ‹ | ⌃ | › |
| ↙ | ⌄ | ↘ |

| ✥ move | ⤢ scale | ⌞⌝ borders |

image-20221209143418044

ADC Gain(brightness)：
- Gain +/- adjusts the gain for the currently loaded preset

Picture Control：
- Adjust the screen position,scale,borders

The third page:

Filters ?

scanlines	intensity	line filter

peaking	step response

image-20221209145739187

- Scanlines only work with 240p sources. They look best with the Line Filter enabled.

- Peaking and Step Response are subtle sharpening filters and recommended.

The fourth page:

⚙ Settings [?]

Matched Presets

Full Height

Low Res: Use Upscaling

RGBHV/Component Toggle

Output Frame Rate: Force PAL 50Hz to 60Hz

ADC calibration

Active FrameTime Lock

FrameTime Lock

Switch Lock Method ⇄

Deinterlace Method

Motion Adaptive

Bob

Developer Mode

Custom Slot Filters

image-20221209150428132

1. Matched Presets

    –   If enabled. default to 1280x960 for NTSC 60 and1280x1024 for PAL 50 (does not apply for 720p / 1080p presets）

1. Full Height

    –   Some presets default to not using the entire vertical output resolution, leaving some lines black

    –   With Full Height enabled, these presets will instead scale to fill more of the screen height

    –   (This currently only affects 1920 x 1080)

1. Low Res: Use Upscaling

    –   Low Resolution VGA input: Pass-through or Upscale

    –   Low resolution sources can be either passed on directly or get upscaled

    –   Upscaling may have some border / scaling issues, but is more compatible with displays

    –   Also, refresh rates other than 60Hz are not well supported yet.

    –   "Low resolution" is currently set at below or equal to 640x480 (525 active lines).

1. RGBHV/Component Toggle

    –   The default output mode is RGBHV. suitable for use with VGA cables or HDMI converters

    –   An experimental YPbPr mode can also be selected Compatibility is still spotty

1. Output Frame Rate: Force PAL 50Hz to 60Hz

    –   If your TV does not support 50Hz sources (displaying unknown format, no matter the preset), try this option

    –   The frame rate will not be as smooth. Reboot require

1. ADC calibration

- – Gbscontrol calibrates the ADC offsets on startup

- – In case of color shift problems, try disabling this function

1. Active Frame Time Lock

- – This option keeps the input and output timings aligned, fixing the horizontal tear line that can appear sometimes.

- – Two methods are available. Try switching methods if your display goes blank.

1. Deinterlace Method

- – Gbscontrol detects interlaced content and automatically toggles deinterlacing.

- – Bob Method: essentially no deinterlacing, no added lag but flickers

- – Motion Adaptive: removes flicker, adds 1 frame of lag and shows some artefacts in moving details

- – If possible, configure the source for progressive output. Otherwise, using Motion Adaptive is recommended.

1. Developer Mode（For details, please visit the fifth page）

- – Enables the developer menu which contains various debugging tools

Note: Non-professionals do not set parameters at will

1. Custom Slot Filters

- – When enabled. saved slots recover it owns filter preferences.

- – When disabled, saved slots maintain current filter settings.

The sixth page：

⚡ System

⬇️ Enable OTA	↺ Restart	↺ ⚡ Reset Defaults

💾 Backup [intended for same device] ❓

- Backup / Restore of configuration files
- Backup is valid for current device only

☁️⬇️ Backup	☁️⬆️ Restore

📶 Wi-Fi

📍 Access Point	📻 STA | Scan Network

image-20221209153751450

- Enable OTA（Over The Air）

- Restart GBScontrl

- Initialize all settings of GBSC

note: intended for same device

- Backup / Restore of configuration files

- Backup is valid for current device only

- Search for nearby wireless networks, you can use gbsc to access the Internet