

rgb loop 2

4k video player with automatic multichannel synchronisation and perspective correction

eng manual 0.3

rgbloop2 0.14.0

updated version and tutorials at <https://eshop.rgbloop.com/manual>

4K video player for artists, collectors and galleries with automatic multichannel video synchronisation and perspective correction

- automatically plays video from USB flash in a loop
- intuitive one-click operation
- pause and scroll in video in multi-channel display
- no setup, automatic selection between server and client mode during video synchronization, just plug the ethernet cable into the router and the player will set the necessary addresses itself
- simple 1-click 4 point perspective correction with usb mouse, automatic saving of settings
- automatic start when power failure or disconnection from the network

supported resolutions: 4096x2160, 3840x2160, 1920x1080

perspective correction mode: up to 3840x2160 30fps

non-perspective correction mode: up to 4096x2160 60fps

supported colour profiles: yuv420p, yuv420p10le, p010le

supported video containers: mp4, mov, ts, mkv, avi

supported video codecs: h264, h265, mjpeg

supported audio codecs: aac, mp3, ac3, audio 5.1 over HDMI - aac, ac3

unsupported audio codecs: ADTS

supported file systems: FAT32, exFAT, NTFS, ext4

wiring instructions:

1. plug USB flash into USB port, connect HDMI 2.0 cable for 4k projection
2. for JACK audio output, plug in an external USB sound card
3. for multichannel video projection, plug each device into the router using an ethernet cable (router does not need to be connected to the internet)
4. turn on the projector or TV or other display device
5. connect the supplied 5V power adapter to the device
6. the player turns on and after a while starts playing the video
7. to change the settings (on or off synchronization, perspective correction) you need to have a USB mouse plugged in.
8. to turn off the device, just unplug the 5V power adapter from the power outlet.

control - USB mouse:

left click: control perspective correction, scroll in video, call up edit mode

right click: reset perspective correction (also needed when changing projector or TV with different resolution)

middle wheel click: view other video files in the directory (only the first video file plays after restart)

middle scroll wheel: zoom

single player connection:

the player must have a USB stick plugged in with a supported video file in the root directory



SYNC ENABLE must be deactivated as in the picture, otherwise the player will try to sync and the video will not play. If there are multiple videos on the USB flash, in this mode it will play all videos in sequence.

multiple players connection:

all players must have a USB flash with a supported video file plugged in (video for synchronous playback must be the same length on all devices)



SYNC ENABLE must be activated as in the picture for all players to be synchronized

all players must be connected to the router with an ethernet cable (to the LAN socket on the router, not the WAN). The router usually has 4 ports and in case of connecting more than 4 synchronous players it is possible to use a router that is connected to e.g. an 8 port switch to which all players will be connected. The router must have an active DHCP server that allocates addresses.

player ID: rgbloop8080 | media file: out-reverse.mp4 | size: 81MB | v
current state: client | 3 clients connected to rgbloop0400 | info: 0

- CORNER PIN
- SYNC ENABLE



For checking, the player displays the number of connected devices, in this case 3. If the player is running but does not have a USB flash plugged in, it is not counted as a connected device

enable perspective correction mode:



Perspective mode can be turned off or on with the CORNER PIN switch. By hovering the mouse over a control in one of the four corners of the video, the corner can be dragged to the desired position. Clicking outside the wheel will switch the player to the non-graphical interface mode and save all



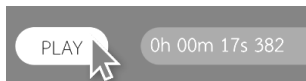
settings at the same time.

timeline movement:



Clicking the mouse on a position on the timeline will move the video to the desired location. Scrolling works even if multiple players are connected at the same time.

Clicking the PLAY button will stop the player. It also works in multi-player mode (this function is useful for documenting a multi-channel video installation, for example)



USB sound card connection:

The rgbloop 2 player does not have a JACK audio output, audio is transferred by default via HDMI cable. A USB sound card can be connected to the player, e.g. Orico SKT3-BK or Creative Sound Blaster Play! 3. If a USB sound card is connected, audio is also transmitted via HDMI. The sound card must be connected before switching on the player.

screen resolution:

The current screen resolution can be found here:

screen resolution: 3840 x 2160

The player itself selects the highest resolution that the projector or TV is capable of displaying. In case the resolution is still unsuitable, it can be set using a text file (created via windows notepad for example), which can be put in the root directory of the USB stick (the same place where the video file is located). The file must be named user_config.txt and must contain this configuration which means that the player will play in 1920x1080 resolution even when connected to e.g. a 4k TV. (there must be no spaces in the text, it must be capitalized and each value on a line must be separate)

```
AUTODETECT=NO
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X=1920
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Y=1080
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notes:

For 4k video 3840x2160 at 60fps, you always need an HDMI 2.0 cable and HDMI 2.0 support on your TV or projector. If the screen only supports 30Hz frequency, the video will not work properly. If the video is only 30fps, it will work with older HDMI 1.4