

X-VUE, LLC

BOX1040 Component to RGBHV Converter

USER MANUAL

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BOX1040

Thank you for purchasing Box1040!

This unique Component(YPbPr) to RGBHV converter provides a component conversion optimized for HD-ready displays for full high-definition viewing. It allows you to view high-definition (HD) content from your component or RGB sources on your existing projector or HD-ready TV.

Box1040 has two input connectors, component and RGB. The component signal is converted to RGB or the input RGB is passed through in RGB with virtually no degradation in quality. It works with any source that has either an RGB or component output providing low level black boost and image alignment features.

Box1040 is plug-n-play with no extra steps required. It can be used for all standard High-definition TV formats: 1080p, 1080i, 720p, 576ip, 480ip. All standard frame rates are supported. Low-level Black Boost and IAC operate in both RGB and Component inputs.

If you have any questions or comments, for fastest response, please email:

info@x-vue.com

Box1040 connects to your source in one of two ways

- For component (YPbPr) sources: Through a standard 3-RCA-RCA cable
- For RGB sources: Through a 15-pin D-Sub VGA connector. Horizontal and Vertical sync information is present in the VGA connector.
- Both displays can be connected at the same time but RGB connection has the priority.

What is included?

- The Box1040 converter
- Wall-mount 9V AC power supply
- Instructions

Specifications/Features:

- Input: Component YPbPr and RGB (RGB with Horizontal and Vertical syncs - RGBHV)
- Output: RGBHV HD-15 D-Sub (VGA) Connector (Female)
- An adjustable Low-Level Black Boost for restoring shadow details
- An Image Alignment Correction circuitry to correctly center the image
- Supports all standard formats, 1080p/1080i/720p, 576ip, 480ip NTSC/PAL
- Full dynamic range for all input modes to maximize the level of details
- Highly accurate color-space-conversion (SD & HD) for the component YPbPr inputs
- Precise black levels - no black crush in any standard mode
- Cable driver to support at least 40 feet cables

Performance depends also on your TV capabilities:

- Check your display for HD RGB input support. Some TV's don't support HD analog inputs.
- The output resolution is the same as the input. E.g. 1080p in -> 1080p out; 720p in -> 720p out.

Important note about synchronization options:

- Box1040 will not automatically change polarities of the input horizontal and vertical syncs, i.e. what comes in, goes out. There is a jumper inside the box that can be used to invert outgoing sync in some cases. Please email support@x-vue.com for details.

Common mistakes/tips:

- Black screen: Display cannot support input resolution (e.g. 1080p signal going into Box1040 but display supports up to 1080i). Common with PS3 and HDFury.
- Colors are stable but wrong: Input source is set to output component (YPbPr) instead of RGB when using RGB connection. Change the source to output RGB (in PS3: Setup Menu->BD/DVD options). – common with HDFury.
- No picture when using IAC: Turn the pot to one end and start “very slowly” turning the pot to other way to find the proper operating area where picture is displayed. You must do it slowly, otherwise you will skip the operating area. There is a unique operating area for all modes (480p/720p/1080i/1080p..)
- PC image doesn't show up on TV: wrong timings. Typically TV:s don't display PC graphics signals due to non-standard timings. Force a HDTV (720p/1080i/1080p) signal out from your graphics cards.
- Washed-out picture: Make sure source device is set to output RGB in “Full-Range mode” – Typically the default is “limited-range”. This is a setting in the player's menus.

Setup

All Box1040 are individually tested and guaranteed to operate properly when shipped. In order to successfully use your Box1040 just follow the simple steps outlined below.

1. Make sure that your source device has the ability to correctly set the timing needed by your display. Box1040 simply passes through the information from your source by converting RGBHV into component or pass-through RGBHV. Box1040 does not alter the source material in any way. **If your source is not capable of supplying the right timing, do not use Box1040.** Example: if you are using a source that outputs 1080p (e.g. HDDVD/Blu ray) but your display only supports 720p/1080i there will be `_no_ picture`). In this case adjust the output mode of your source to 720p/1080i.
2. If using RGB input connector: Make sure your player device (PS3/HD DVD/DVD etc..) is set to output RGB instead of component (YPbPr) when using RGB connection over HDMI (e.g. HDFury). It is necessary that the signal going into Box1040 is in RGB format, otherwise colors will not be displayed properly. For example, in PS3 you need to set this in the system menu(BD/DVD options). If you are using a HDMI/DVI to RGB converter box, you can use it directly; the output should be in the correct mode.
3. If using component YPbPr connection: Simply plug in the color coded connectors in the correct order.
4. RGB input connector will always have a priority over the component connector. If both are connected at the same time, please turn off the RGB source in order to switch to the component input side.
3. Use a regular male VGA-VGA cable (typically used in PC monitors) to connect Box1040 and your display. You can also use male VGA-5BNC breakout cable if your display/projector only supports BNC connectors. Please note you will need to connect all five signals (R, G, B, H, V)
4. Connect the power supply to Box1040. A proper power supply is 9V AC, greater than 300mA and 2.1mm output plug. It must be AC-type (not DC). Make sure you are using a proper voltage rating, i.e. in the US 110V and in Europe 230V.
5. If you are using Image Alignment Correction (IAC), tweak the pot to obtain picture in the desired location (refer to instructions later).
6. If you are experiencing troubles, double check all connections are secured fully and cycle the power to Box1040. In the case of questions, please email support@x-vue.com

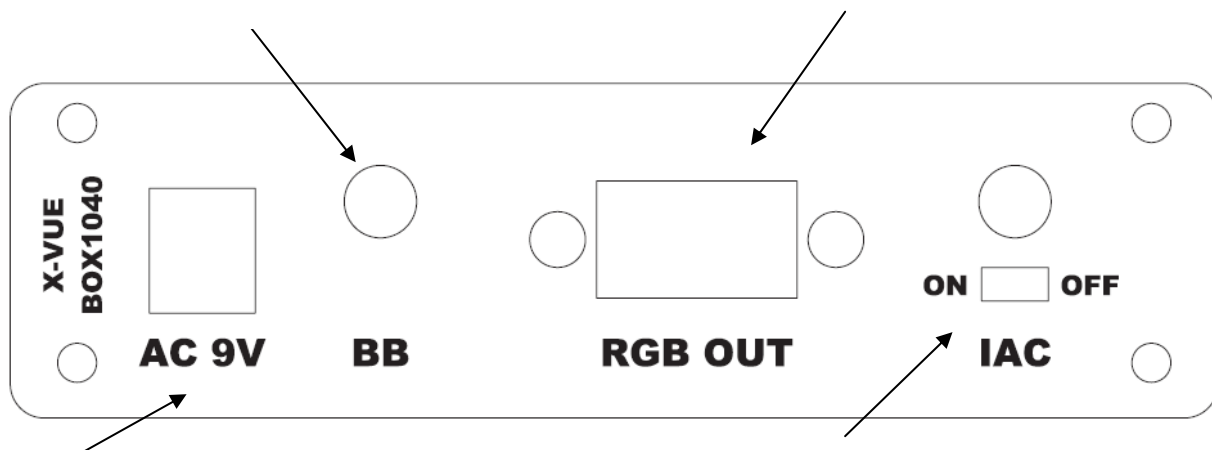
Warning! Using incorrect scan-frequencies can damage your TV or front projector. X-VUE, LLC takes no responsibility implied or otherwise and X-VUE, LLC's total liability to any customer for any and all claims relating to the use of the **BOX1040** under any circumstances shall not exceed the total amount paid by such user to X-VUE, LLC for obtaining this product.

Low-Level Black Boost

To control the low-level black boost (i.e. Gamma) turn the knob counter-clock-wise to increase the effect. Use your favorite movie to gauge how much correction is applied and leave the setting to that position. For maximum effect, reduce the overall brightness setting in your TV to low value and increase BB-value. You will note tremendous shadow details appear.

RGB output connector

Insert the VGA connector to the display device here.



POWER SUPPLY CONNECTOR

Use the included power supply.

The specifications are: 9V AC, minimum of 300mA current, 2.1mm plug. Please note, the power supply **MUST** be AC-type, not DC)

Image Alignment Correction

Before turning IAC on verify that picture is shown on the display with IAC in off position. This makes sure that signal is passed through Box1040 properly.

IAC off: Flip the switch towards the “off” position. In this mode no changes are made to the timings and the synchronization is simply passed through to the output.

IAC on: Flip the switch towards “on” position and IAC is enabled. Factory setting is for a proper picture alignment in 1080i mode, but it may have shifted during shipping. If you would like to fine tune the placement or if you are using other than 1080i (e.g. 720p/1080p) then turn the potentiometer “very slowly”. You will see the picture move accordingly. In any given mode, there is a very narrow range of pot-movement for proper picture – otherwise the screen is black (no picture). This is normal. You may also turn the pot all the way to the other end and very slowly turn it back until picture is displayed. Then you can simply fine tune to perfectly center the image and leave the setting there.