

- Supports RGB and RGBS input
- Supports VGA output
- SYNC- frequencies are not modified
- Screen resolution is not modified



RGB TO VGA CONVERTER

RGB TO VGA CONVERTER

Input Interface	RGB, RGBS
Output Interface	VGA
Output Resolution	up to 1280x1024, -> HSYNC = Composite (HSYNC + VSYNC) up to 1024x768, -> HSYNC = HSYNC
Power Supply	Universal Switchmode PSU (90-240V Input)
Dimensions	120 x 120 x 35 mm-desktop device (mounting brackets available)

RGB to VGA converter

For a long time, RGB has been a popular graphics standard for industrial applications. In this interface, three (coaxial) cables carry the colour information: R (red), G (green) and B (blue). In addition, the Green signal carries the Synchronization signals, HSYNC and VSYNC.

Nowadays, displays for RGB sources are quite hard to get – especially if the customer wants to get the benefits of a flat screen. Clearly, there is a need to convert RGB signals for the modern graphics interface.

Why can't you easily attach a VGA screen to an RGB source?

The performance of a CRT monitor is determined by two main parameters: the signal type, VGA, RGB, FBAS, SVHS; and the synchronization frequencies, HSYNC and VSYNC.

To display a video signal, standard VGA screens need:

- Red, Green and Blue analogue signals at 0.7Vpp
- TTL-level synchronization signals (HSYNC and VSYNC)
- HSYNC in the range: 30kHz up to more than 100kHz
- VSYNC in the range: 50Hz up to more than 120Hz

Most RGB sources generate signals derived from (TV-) video standards: 50Hz VSYNC and 15,625kHz HSYNC. The major problem is that the sync frequencies are too slow for modern displays – they won't show a picture and may generate the error message 'out of range'. In these cases, this device is **NOT** suitable!

The use of flat screens (TFT)

Compared with using a CRT monitor, it is considerably more difficult to use a TFT screen with RGB signals. TFTs must digitize the incoming video signals and display the result. To do this, the monitor needs to be given the exact count of pixels per line and the phase of the pixels. However, even if you strip the sync signals from the green signal and convert it to VGA format, there is the same problem as with VGA screens: the sync frequencies are too slow for modern displays. Additionally, many flat screens only operate with the so-called VESA resolutions. Also in this case, this device is not suitable for the conversion of the signals.

If your graphic source generates too slow signals or if your screen does only 'understand' VESA resolutions, this device is not suitable to convert from RGB to VGA. However in these cases, we suggest our RGB to DVI (VGA) converter to solve these problems.

Highlights

- *Perfect Image Quality at all Resolutions*
- *Output: Supports VGA*
- *Input: Supports RGB, RGBS with a maximum resolution of 1280x1024@75Hz*
- *Output: RGBCV for resolutions higher than 1024x768 (= Red, Green, Blue, Composite H/V, VSYNC)*
- *Output: RGBCV for resolutions up to 1024x768 (= Red, Green, Blue, HSYNC, VSYNC)*
- *Power Supply: 8...28VDC – Switching voltage in an electrical cabinet is sufficient! An Universal Switchmode PSU (90-240V Input) is in the list of parts supplied.*
- *Mounting brackets for screw mounting or to mount by snap-on allow to install this device in 19" racks or electrical cabinets.*