

- Supports RGB and RGBS input (Y/C and Composite video optional)
- Supports DVI and VGA output
- Output resolution up to 1280x1024
- Different scaling modes for best match to your application
- More than 70 presets for common video standards (including PAL/NTSC)
- User mode for free adaption to unknown RGB sources



RGB TO DVI(/VGA) CONVERTER

RGB TO DVI(VGA) CONVERTER



Input Interface	RGB, RGBS, (Y/C and composite optionally)
Output Interface	DVI, VGA
Output Resolution	1280x1024, 1024x768, 800x600, 640x480 @ 60 Hz 1280x1024, 1024x768, 800x600, 640x480 @ 75 Hz
Scaling Modes	1:1 –original size within a black frame. Full screen –stretch to fill all available screen space Proportional - . stretch to fill one screen dimension completely 2:1 –double original size within a black frame
Power Supply	Universal Switchmode PSU (90-240V Input)
Dimensions	170 x 133 x 41 mm-desktop device (19" rack brackets available)

RGB to DVI(VGA) converter

A lot of customers, especially in industrial environments, use since a long time displays with a so called RGB Interface. In this Interface, three (coaxial) cables carry the colour information of R (red), G (green) and B (blue). In addition, the Green Signal carries the Synchronization signals HSYNC and VSYNC.

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

Why can't you easily attach a VGA (or DVI) 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 as analogue signals with 0.7Vpp and synchronization signals as TTL-signals in a range for HSYNC of 30kHz up to more than 100kHz and for VSYNC of 50Hz up to more than 120Hz.

Most of the RGB sources are old fashioned and generate signals, which are derived from (TV-) video standards: 50Hz VSYNC and 15,625kHz HSYNC. The problem is: the sync frequencies are too slow for modern displays – they won't show any picture but perhaps the error message 'out of range'

The use of Flatscreens (TFT)

The use of TFT-Monitors with RGB signals is more difficult than having a CRT: these monitors 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. Even if you strip the sync signals from the green signal and convert it to VGA format, in most cases the screens will stay dark. First, there is the same problem as with VGA screens: the sync frequencies are too slow for modern displays. But additionally, many flat screens only operate with the so-called VESA resolutions.

What is the RGB to DVI (VGA) converter doing to solve these problems?

The RGB to DVI/VGA Converter converts the signals of a RGB source in a format that can be shown on both: a traditional CRT with VGA connector (using an adaptor) as well as on a flatscreen with DVI connector.

The device digitizes the incoming video signals and stores them in an internal video memory. From there they are displayed in a compatible, user selectable, format: 640x480, 800x600, 1024x768 or 1280x1024, with 75Hz or 60Hz refresh rate. Before displaying, the picture can be stretched to fit to the screen size: 1:1 in a black box; fully fitting to the screen size; fitting one dimension with the other scaled appropriately; or at a fixed 2:1 stretch factor.

More than 70 video formats are preinstalled in the internal table. Unknown video modes can be setup by the customer through an On Screen Display

Highlights

- Perfect Image Quality at all Resolutions
- Output: Supports both VGA and the latest DVI video interfaces (future proof your investment)
- Input: Supports RGB, RGBS, (Y/C and composite optionally)
- Output Video Resolutions: 640x480, 800x600, 1024x768, 1280x1024 @ 60Hz for to use with flatscreens
- Output Video Resolutions: 640x480, 800x600, 1024x768, 1280x1024 @ 75Hz for to use with CRT screens
- Output can be resized to match the screen dimensions:
1:1 –original size within a black frame.
Full screen –stretch to fill all available screen space
Proportional - . stretch to fill one screen dimension completely
2:1 –double original size within a black frame
- More than 70 video formats are preinstalled in the internal table. Unknown video modes can be setup by the customer through an On Screen Display
- Rack Mount options (19"): Mount up to 3 devices in 19"/1U or up to 6 devices in 19"/2U. This saves expensive rack space.