- **Supports RGB, RGBS, RGBHV (VGA), CGA, MDA und EGA Input**
- **Supports DVI and VGA Output**
- **Output resolution up to 1280x1024**
- **Different scaling modes for best match to your application**
- **More than 80 presets for common video standards (including PAL/NTSC)**
- **On Screen Display (OSD) for customization to non-standard RGB sources**

RGB/DVI

Converter

RGB TO DVI(/VGA) CONVERTER
CONVERTS ALSO EGA, CGA, MDA
CONNECT PAST SOURCES TO
MODERN DISPLAYS.

RGB/DVI(VGA) CONVERTER

Connect past sources to modern displays.

Input Interface	RGB, RGBS, RGBHV (VGA), CGA, MDA, EGA
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	103 x 143 x 29 mm desktop device (19” rack brackets available)

RGB to DVI(/VGA) converter

For a long time, RGB and EGA/MDA/CGA have been popular graphics standards for industrial applications. In the RGB 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. In the EGA/MDA/CGA interface TTL signals are used.

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/TTL signals for the modern graphics interface.

Why can’t you easily attach a DVI or VGA screen to an RGB source/TTL?

A screen designed for VGA cannot normally display RGB/TTL signals for two reasons:

1. A VGA screen requires H/V-Synchronization as TTL signals

2. Many RGB/TTL sources generate HSYNC frequencies below of 30kHz – to slow for modern VGA displays.

To display RGB/TTL data on a modern VGA or DVI display, the RGB to DVI(/VGA) Converter digitises the incoming signals, stores them in an internal video memory and displays them from there in a common resolution. The picture can be displayed in original size or format filling. The RGB to DVI(/VGA) Converter is equipped with various automatic and manual video correction tools in an on screen utility

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 a TTL signal, there is the same problem as with VGA screens: the sync frequencies are to slow for modern displays. Additionally, many flat screens only operate with the so-called VESA resolutions.

How does the RGB to DVI (/VGA) converter solve these problems?

The RGB to DVI/VGA Converter converts the signals of a RGB/TTL 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 80 video formats are pre-installed in the device’s internal table. Non-standard and unsupported 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-proofing your investment)*
- *Input: Supports RGB, RGBS, RGBHV (VGA), CGA, MDA and EGA*
- *Output:*
  Video Resolutions: 640x480, 800x600, 1024x768, 1280x1024 @ 75Hz for use with CRT screens
  Video Resolutions: 640x480, 800x600, 1024x768, 1280x1024 @ 75Hz for use with TFT Displays
- *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 80 video formats are preinstalled in the internal table. Unknown video modes can be setup by the customer through an On Screen Display*
- *Integrating possibilities in switch boards by using mounting plates and in 19” boards by using rackmount kits: Mount up to 4 devices in 19”/1U – efficient use of expensive rack space.*

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