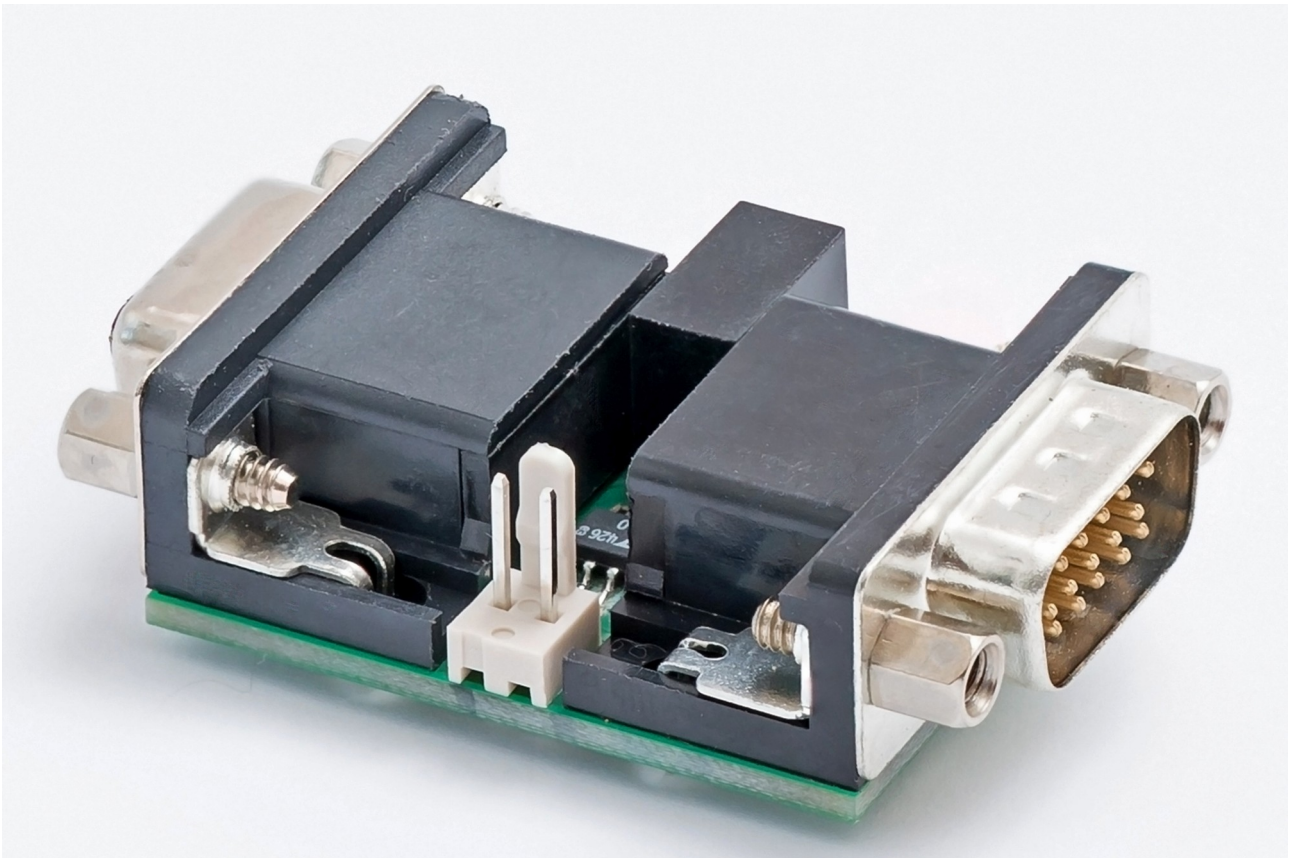




TT Video ECL to VGA Adapter Operating Manual



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Subject to change without notice.
W. Förster

Description

Atari TT Computer is equipped with several video modes. The table below lists all the video resolutions of the TT.

Name	Resolution	Signal Level	Suitable Atari Monitors
ST-Low	320x200 / 16 Colours	TTL	SC1224, SC1424
ST-Medium	640x200 / 4 Colours	TTL	SC1224, SC1424
ST-High	640x400 / Duochrome	TTL	SM124, SM125, SM146
TT-Low	320x480 / 256 Colours	TTL	PTC1426
TT-Medium	640x480 / 16 Colours	TTL	PTC1426
TT-High	1280x960 / Monochrome	ECL	SM195

Remarks:

1. Colour resolutions have a palette of 4096 colours to choose from.
2. The Duochrome mode does not only cover black and white but any two colours.
3. TTL stands for **T**ransistor-**T**ransistor-**L**ogic, a widespread electrical standard.
4. ECL stands for **E**mitter-**C**oupled-**L**ogic.

The blue marked **TTL** signals are suitable to drive common monitors or TFTs equipped with a VGA interface (VGA = **V**ideo **G**raphics **A**rray). In this case a simple cable adapter is sufficient to connect either the colour signals or the monochrome signal to the VGA connector of the monitor. Depending on the cable the monitor works in monochrome or colour mode.

The red marked **ECL** signal is not suitable to be connected directly via a passive cable adapter but requires some kind of signal level shifter hardware. On the one hand this hardware provides the signal shifting and on the other hand it provides a fast signal processing to meet the requirements of the TT ECL interface.

The TT ECL to VGA Adapter is the appropriate hardware for this purpose. It is easily to install. On one side of the adapter there is a 15-pin VGA male connector which is directly connected to the TT video output. On the other side there is a 15-pin VGA female connector suitable to connect a standard VGA cable which is connected to the VGA input of the monitor. Due to there being active hardware components used for level shifting, the adapter requires a power supply of 5V DC. It is provided using a standard USB power supply with 500mA current or more. The adapter is equipped with a Micro-B USB receptacle.

Remark:

The ECL to VGA Adapter works like a level shifter converting ECL level to conform to VGA signal levels. The video timing of the Atari TT is unaffected. It can therefore not be guaranteed that all monitors will work correctly. It depends moreover on the synchronisation capability of the monitor whether the image is displayed correctly or not. In addition adjusting the phase or clock settings on some monitors may improve the image.

Contact:

Inventronik GmbH, Finkenstraße 48, 70199 Stuttgart. Internet: www.inventronik.de; www.experiment-s.de.
Email: info@inventronik.de