LEGACY PIXEL TRANSFORMER

29LPT1001T ***RGB-to-DVI VIDEO SCALING***

SPECIFICATION

INPUTS:

RGB Signal :	a. Analog RGB 0.7-1.0Vp-p b. TTL >2.75Vp-p (additional cables required)
Input Connectors:	15 pin D, BNC x 5
Sync. Type/Level:	Separate H&V (+/-ve) TTL or Composite (-ve) TTL or Sync-on-Green (-ve) 0.3V
Slow Scan Support: (see table examples)	Pre-programmed Analog or TTL inputs in 15-40kHz range + Autosave of new signals
Horizontal Scan:	15-80kHz
Vertical Scan:	40-80Hz
Clock Rate:	135MHz max
Controls: (On Screen Display) buttons at front)	Brightness, Contrast, H/V size & position plus Full OSD Menu functions
OUTPUTS: Digital Signal:	DVI-D (using cable supplied with monitor)
Resolution:	Selectable according to native resolution of monitor used
Controls:	Full use of monitor controls

POWER INPUTS

Power Supply:	90-265Vac 50/60Hz Internal Switched Mode
Power Consumption:	20W Max.

PHYSICAL/ENVIRONMENTAL

Dimensions (approx):	294 x 165 x 58 mm
Weight (approx):	2Kg.
Housing:	Painted Steel (Black)
Operating Temp:	0 to 50°C
Storage Temp:	-20 to 65°C

PART NUMBERS

Analogue Video:	29LPT1001T
TTL Cables: *	30PH1224 (3-Bit & 6-Bit) 30PH1241 (4-Bit)
AC "Y" Lead *	70KA6506 (AC In/AC Out)
	* Optional Items as required

Legacy Signal Conversion

- **Specially designed for Slow Scan Signals (e.g. Siemens WF470, ABB MOD300, GEM 80)**
- **TTL, Analogue & Interlaced Signals accepted**
- **Automatic Save of new signal timings**
- **Output to any standard DVI-D TFT Monitor**
- **BNC & 15-D input connectors**
- **Selectable Output Resolutions according to DVI-D monitor used**
- **Rugged Metal Construction with mounting points**

The **29LPT1001T** is a unique RGB video scaler designed for Slow Scan signals. It transforms the low pixel count produced by legacy System controllers into full screen displays on modern TFT monitors.
It is proposed as an alternative to KME's UN Series of Slow Scan TFT monitors where benign environments allows the use of a commercial PC monitor instead of an industrial-grade unit.

The **29LPT1001T** accepts a wide range of non-standard RGB video signals (analogue or TTL) and transforms them into DVI-D format with scaling according to the native resolution of the PC monitor. (SVGA, XGA or SXGA) Low refresh rate or interlaced signals are displayed flicker-free with superb clarity. 60+ timings in the 15kHz – 40kHz range are pre-programmed at delivery. Unknown signals are automatically displayed but some fine adjustments will be required for optimization. New settings are stored and automatically recalled when connected again. The table below shows a small selection of pre-programmed timings.

H. kHz	V. Hz	Pixels		H. kHz	V. Hz	Pixels
15.625	50	714 * 288		15.63	50	560 * 275
15.63	60	808 * 238		15.72	60	564 * 240
15.72	60	508 * 240		15.72	60	604 * 240
15.72	60	640 * 200		16.10	50	564 * 304
16.276	70	640 * 220		16.79	70	577 * 215
17.85	50	508 * 338		21.83	60	640 * 350
20.65	50	640 * 384		24.78	60	640 * 384

TL Electronic GmbH
Gutenbergstr. 7
D-85748 Garching-Hochbrück

Telefon: +49 89 329449-0
Telefax: +49 89 329449-50
Email: info@tl-electronic.de

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What is a *Legacy* Signal?
We define this as any signal that does not conform to modern VESA standards for pixel resolution and scanning frequency. VESA standards start at VGA. (31.47kHz @60Hz refresh rate = 640 x 480 pixels) Legacy signals have lower scanning frequencies in the 15-30kHz range and have pixel resolutions that do not correspond to VESA.

Can I connect *Any* Legacy signal to the LPT?
We believe that we have researched all non-standard signal combinations including Interlaced formats. The LPT is created from our extensive experience in supplying our UN Series TFT monitors to worldwide customers forced to replace old CRT monitors. TTL Video signals are notoriously noisy (cross-talk between video & syncs) so we prefer to supply special cables to input any 9D TTL connector to 15D on LPT.

What is Scaling?
On CRT monitors the number of lines displayable is fixed by the H.Scan and V.Scan frequencies. The combination of a 15.625kHz horizontal scan signal at 60Hz results in 260 lines. A 19.0" TFT monitor to SXGA standard has a 1280 horizontal x 1024 vertical pixel resolution. So the 260 lines must be applied to a fixed 1024 pixel platform. Simply, this is scaling (but there are complex algorithms concerned with frequency recognition, video sampling as well as scaling to achieve the transformation from CRT to TFT and produce modern video quality from a legacy signal)

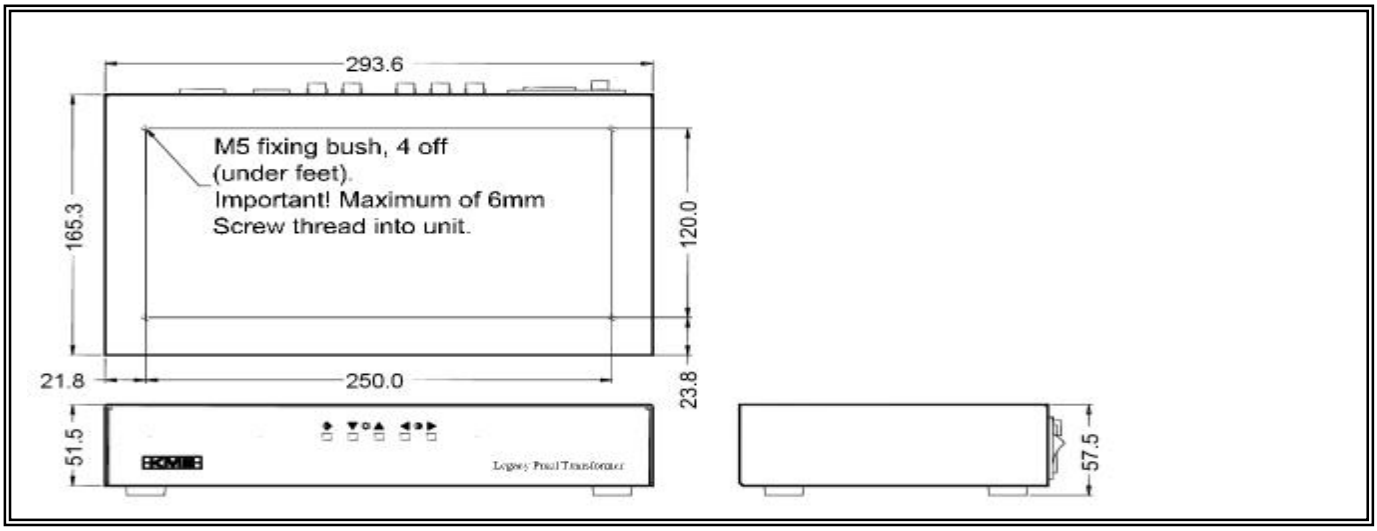
Can I use any PC Monitor?
29LPT1001T is designed for use with only TFT monitors that have a DVI-D digital input. Any size of DVI-D monitor with a resolution of SVGA or more can be used; even a 42" WXGA is possible. LCD Projectors also can be connected to the LPT for large area displays of legacy signals.

Do I have to modify the PC monitor?
No. Use the monitor exactly as supplied. The LPT produces a standard DVI-D output irrespective of the legacy signal input and the monitor recognizes this as if it was a VESA signal. So you can use any PC monitor that is available locally, and enjoy PC Monitor extended warranties.

Can I use a CRT PC Monitor?
If you can find a CRT monitor with DVI-D inputs then Yes. But these are not commonly available. To use an Analogue CRT monitor you need a special version of LPT – 29LPT1001CT. This is designed for CRT use but is more expensive due to the additional D-to-A circuitry required.

Can I install LPT remotely from the Monitor?
In many installations the PC TFT monitor will sit on top of the LPT black box. However DVI-D can operate reliably up to 5 metres from the monitor; 10 metres is not recommended without additional video distribution hardware.
The plastic feet in the base of the unit can be removed to reveal 4 x M5 threaded inserts. These can be used to mount the LPT to a metal plate.

Outline Dimensions



TL Electronic GmbH
Gutenbergstr. 7
D-85748 Garching-Hochbrück

Telefon: +49 89 329449-0
Telefax: +49 89 329449-50
Email: info@tl-electronic.de