



SLG 3000 2. Release, state: February 2011

## ***Functional description and connecting hints***

First: Many **thanks** for purchasing this simply, but efficient working device. Intentional simply constructed, it may be produced and offered for a convenient price. Tough the actual purpose, generating of scanlines, is realized absolutely satisfying. There is no noticeable time lag, because it's only a simple analogue switch, wired in your VGA cable.

It is careful designed, tested with several VGA-sources and displays that basically use the analogue VGA signal transmission standard. Every unit is individually tested before delivering.

The really most **interesting practical operation** should be the lower VGA resolution 640 x 480 at circa 60 Hz, using the double scanning mode of your graphic device. The graphic readout always spends two lines with identically image content. This resolution is common used during the emulation of vintage video games from the 15 KHz areas applying any contemporary display. Here sets the simply, but greatly effective concept. Every second line is attenuated or cut off cyclical, applying electronically switches. The attenuation is infinitely adjustable from 0 to circa 100 %. Due to the fact, that every second line has an identically image content like the previous, you get **no loss of image information**. The result is a image with **"REAL SCANLINES"!**

**Easiest connection:**

Loop through the VGA connection using a VGA extension cable, male / male plugs.

**Important:**

Make sure, that the PCB gets no contact with metallic surfaces inside your machine. So take care to **fix it insulated** from other conducting parts. Connection to your equipment should be done only while power is switched off. Proper function is only guaranteed during strict observance of the VGA norm standards.

**Matching different resolutions:**

You may use the DIP switches 4 and 5 to accommodate the functionality

Resolution	DIP4	DIP5	Effect
640 x480	OFF	ON	every odd line attenuated
	ON	OFF	every even line attenuated

Remark: The unit is able to handle this high resolutions, practical there is no mind about that. The effect is hard to notice; in addition you get loss of picture information.

**Miscellaneous:**

Please connect the unit applying only premium extension cable, to avoid image interferences. You prevent overshooting video signal pulses, caused by mismatching from poor quality.