TAMUZ
BROADCAST MONITORS

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PRESS RELEASE

GREY OWL SL,
CLASS-2 BROADCAST MONITORS

Las Vegas, April 20th 2009

Exhibiting at the NAB '09 Show in Las Vegas, NV, TAMUZ presents their range of customized and unique LCD Broadcast Video Monitors.

At this event TAMUZ presents some highlights from their LCD Video Monitor product range to the American market, which are developed and manufactured in Henstedt-Ulzburg, Germany. „We making the monitor products the market needs. Our goal is, to design and manufacture monitors with the best image quality, rich features for applications, long-time product availability, at a cost effective price." says Erwin W. Lissy, President of TAMUZ Broadcast Monitors.

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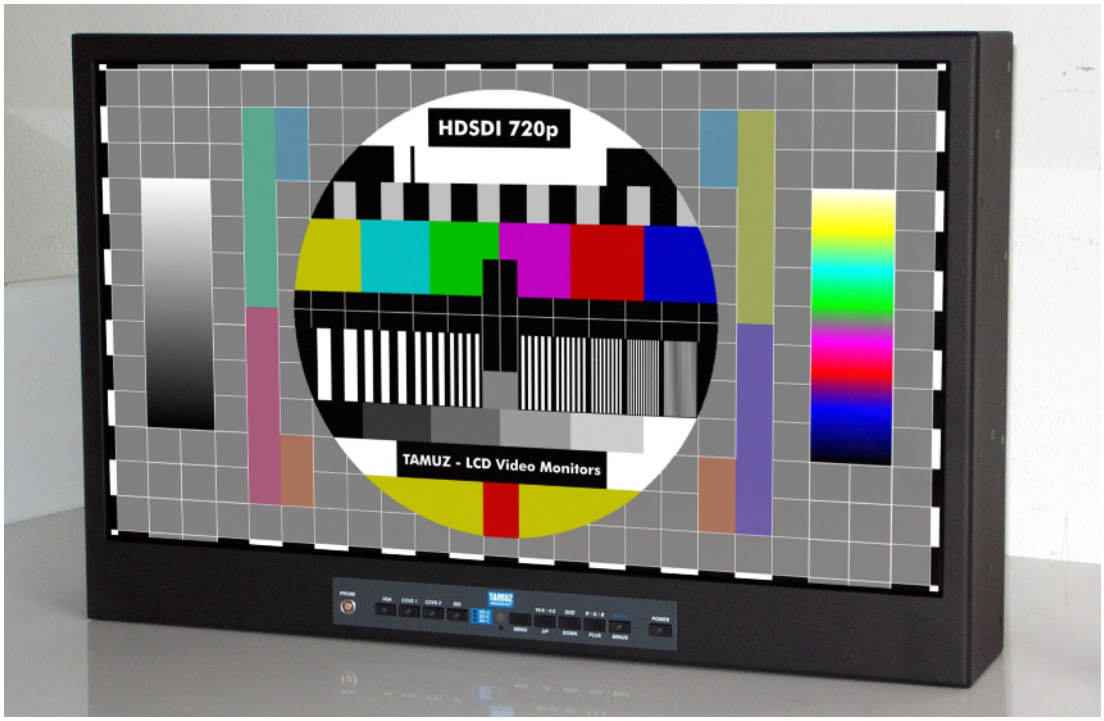
we are producing the monitors the market demands. Our goal is, to design and manufacture monitors with the best image quality, rich features for applications, long-time product availability, at a cost effective price." says Erwin W. Lissy, President of TAMUZ Broadcast Monitors.

„Terms like Class-2, Grade B, Grade-2 or Broadcast Monitor used by marketing and sales people all over the industry in an attempt to classify their monitor products are confusing customers. The standard organisations, first of all the EBU, classifies the top-of-the-line monitor as Grade-1. This specifies the monitor as a 'monitor may have wider tolerances on its specification than a Grade 1 monitor."; comments Erwin W. Lissy; „but Grade-2 can be mis-matched with the term Grade B (which by definition means 'device with scratches or used'), so TAMUZ uses the term Class-2 for its high-performance broadcast monitors, which was the common term in the past CRT times!"

GREY OWL CLASS-2 BROADCAST MONITORS

The launch of the GREY OWL SL series at IBC'08 was a result of requests made by some key customers which lead to further development of the known series and now hundreds of GREY OWL monitors have been installed with broadcasters world wide.



The GREY OWL SL monitors (SL stands for StudioLine) are available in screen sizes of 8.4“, 15“, 17“W, 19“W, 20“W, 22“W, 24“W and 27“W. The new monitor series confirms the EBU t3320 Grade-2 and EBU t3325 measurement recommendations and are different in their specifications for brightness, contrast and black to the standard models. The brightness is set for the European market to 80 cd/m^2 nominal, but adjustable in the range of 70 to 100 cd/m^2. For the American market the monitors are aligned to 35 fL, the range is set as 20 to 40 fL.

The contrast is more than 500:1 and the Black is darker as 0,1 fL (0.4 cd/m^2) at the nominal brightness of 35 fL. These are the recommended values of the EBU t3320 Grade-2 monitors. A SMPTE standard will follow shortly.

To reach these specifications, TAMUZ developed for all the different screen sizes customized LCD panels. Additionally, all SL monitors are equipped with a contrast filter glass in front. Picture quality, especially for the FLM 108, is absolutely perfect. The display offers wide viewing angles (>±45° HV at 50% visible brightness level) and meets the requirements of BT.706 or EBU compliant colors.

In the literature viewing angle is described as the angle where a contrast of 10:1 in luminance or 5:1 in chrominance is still perceptible. Data sheets list mostly high grades, like ±85° H and V. This means that the viewer looks in a side angle of 85° onto the display and sees a brightness of 1 fL when black is 0,1 fL and the nominal brightness level is 23 fL. Consequently this is not a very realistic data sheet value.

HD OR SD DIGITAL INPUTS

GREY OWL SL series monitors are equipped with various inputs. Three SD/HD-SDI inputs, analog composite inputs plus analog and digital computer signal inputs as VGA and DVI are standard.

An additional option are analog HD component inputs accepting most high-frequency RGB/YUV signals. All inputs auto-detecting the format and standard of the input signal to process the image with lowest latency at no scaling artifacts.

DE-INTERLACER AND BLACK-LINE INSERTION

Progressive formats are always processed in their native vertical frequency. To process interlace formats several de-interlacer modes are selectable.

For special purposes an interlace simulation mode, named Black-Line Insertion, is selectable. This mode displays each field of interlaced video (odd and even) separately and blanking the corresponding second field with black lines. Using this mode the displayed image looks like a CRT image. SD and HD formats can be displayed scaled to fit the screen or 1:1 in a pixel-to-pixel mode. For displaying SD without scaling a 2:1 mode doubles the image size on screen.

MANUAL OR REMOTE OPERATION

The GREY OWL SL series is equipped with a keyboard at the front containing a number of buttons for several functions; Inputs, Brightness, Contrast, Saturation, Backlight, Zoom, and Marke which allow direct user adjustment. More specific settings can be done within the OSD menu.

Additionally, the TCP/IP port at the rear can be utilized in the unique operation of our MRC software. The MRC software was developed by TAMUZ engineers and it allows you to control hundreds of monitors in a network from a single keyboard. The MRC software is a excellent tool to manage monitor settings and to control a very unique feature within TAMUZ monitors, the Anti-Sticking mode. This mode helps to prevent the typical LCD effect of sticking when the monitor is used for long term display of static content, a general

issue with LCD panels.

Using a standard web browser monitor settings are accessible via the TCP/IP port.

COLOR ALIGNMENT OF LCD VIDEO MONITORS

And last but not least, the GREY OWL SL series, like most of TAMUZ monitors, are equipped with AAC - the Automatic Alignment and Calibration function. A connector at the front of the monitor accommodates various color analyzer probes, like the Konica-Minolta CS-200, Klein Instruments K-10 or DK Technologies PM 5639 allowing an easy interface for the probe in color calibration.

The monitor itself handles the alignment by its internal processor, so no external PC or Test Generator is necessary. The AAC function generates a individual LUT to correct the colormetry and the gamma shading for the monitor to display the image at its best without banding effects. Up to four individual setups can be stored inside the monitor using the embedded web browser interface. For best and perfect calibrated performance the reset button at the front will reconfigure all user settings back to the factory default

COST EFFECTIVE CLASS-2 BROADCAST MONITORS

The GREY OWL SL series is absolutely cost and space effective. The series contains the FLM 108 / FLM 115 / FLM 117W / FLM 119W / FLM 120W / FLM 122W / FLM 124W and FLM 127W.

The monitor housing is designed to save rack space in height and depth. From FLM 108 up to FLM 119W the monitors fits inside the 19“ rack rails. The larger screens from FLM 120W up to FLM 127W can be mounted in front of a 19“ rack using a universal mounting adapter.

For desktop applications three different stands are available.

CONFIRMING SMPTE, BT.709 and EBU 3320

The GREY OWL SL Monitors are an ideal solution for all broadcasters who want to built a control room confirming the SMPTE, ITU or EBU recommendations for alignment critical applications.

Technical specifications, data sheets and manuals are available online for download at *www.tamuz.tv*. For latest high-resolution images for printing use the download area at www.tamuz.tv/pressframe.htm or call-in by phone or email.

TAMUZ Broadcast Monitors, established in 1996, a leading brand in the LCD video monitor industry, is a division of the privately owned PTV Professional TeleVision GmbH, founded in 1993, to develop and manufacture LCD monitors for video applications like Broadcast, Entertainment, Medical, Industry and other branches. TAMUZ monitors are sold world wide through a distributor and a dealer network.

TAMUZ manufactures LCD Monitors for Broadcast Applications in the size from 4" up to 82". The IMPERIAL EAGLE series is designed for high-end broadcast and post production applications confirming SMPTE/EBU recommendations at 35/23 fL brightness. The SPARROWHAWK series is designed for displaying MultiView images. The BLACK MILAN series is designed for broadcast applications as a hybrid monitor containing a four input MultiViewer and direct-view inputs. The HAWK series is designed for portable applications in acquisition at the filmset.

To serve the North American market (USA, Canada, Mexico) a branch office (TAMUZ USA, LLC.) is operating in Chester, New Jersey. For details see www.tamuz-usa.com, or contact Dave Hartmann at 908 - 879 0010 (info@tamuz-usa.com).

The South American market is supported by Inviso Video Solutions International, Inc. based in Miami FL as master distributor and their network of sub dealers. (www.inviso.tv)