

**TAMUZ  
MONITORS**

# FLM 109W

Digital Broadcast Monitor



## GREY OWL series

### **A high-quality multi-format Broadcast Video Monitor, for SD and HDTV applications**

- High-resolution active matrix TFT LCD color displays
- Aligned as StudioLine version to fulfill EBU t3320 Class-2 Recommendation
- QA follows EBU t3325 Recommendation, assured by KonicaMinolta CS-2000
- 16:9 and 4:3 aspect ratio mode, overscan/underscan mode
- MultiSync and MultiFormat capability
- De-interlacer switchable, shortest processing time 1 field
- Multiple inputs for SD/HD-SDI, RGBHV, RGsB or RGBS, DVI, CCVS
- Direct access keys for input selection and main features
- OSD menu for individual setups
- IR remote controller and IP addressable 10/100 baseT port
- 3-color Tally light at front, GPI/O port for Input and Tally
- Built-in AAC Auto Alignment and Calibration with optional Color Analyzer probe
- Rugged and compact lightweight full metal housing design
- Anti-reflective glass protection filter, optional with ND function



**High-End Monitoring Solutions for  
Broadcast, Industrial, Medical, Office, Entertainment,  
Surveillance, Military or Aviation applications!**

# MultiFormat Digital Broadcast Monitors

TAMUZ GREY OWL monitors are fully loaded with state-of-the-art LCD technology and broadcast features, like 3-color ON-AIR Tally, GPI/O port, IR-remote, multiple inputs, R/G/B only, displaying the blanking area, WSS detection, pixel-mapping or full screen mode, etc.

## Technical Specifications:

Screen Type: . . . . . active matrix color TFT, MVA technology  
 Screen Size: . . . . . 8.9"  
 Screen Format: . . . . . 17:10 native aspect ratio  
 Pixel Resolution: . . . . . 1024 x 600 RGB dots  
 Screen Resolution: . . . . . 133 dpi  
 Color Resolution: . . . . . 16 million colors  
 Color Reproduction: . . . . . full EBU color space  
 Color Temperature: . . . . . 6504°K nominal  
 Color Temp. Range: . . . . . 3200 to 9300 °K select and adjustable  
 Brightness @ SL Version: aligned to 35 fL / 120 cd/m2  
 Black @ SL Version: . . . . . aligned to <0,1 fL / 0,16 cd/m2  
 Contrast @ SL Version: . . . . . >650:1 for static B/W/B  
 Brightness @ standard: . . . . . aligned to 200 cd/m2, max. 350 cd/m2  
 Black @ standard: . . . . . aligned to <0,4 cd/m2  
 Contrast @ standard: . . . . . >600:1 for static B/W/B  
 Response Time: . . . . . 12 ms, typical  
 Viewing Angle H: . . . . . ±85° horizontal  
 Viewing Angle V: . . . . . ±85° vertical  
 Backlight: . . . . . multiple special LEDs  
 Backlight Lifetime: . . . . . >40.000 h's  
 Screen Classification: . . . . . A Grade  
 Screen Certification: . . . . . ISO 13406-2, Cl. 2

Tally Light: . . . . . multicolor LED in front  
 Tally Function: . . . . . closed contact at GPI/O port  
 Tally Connector: . . . . . Sub-D 9pin

Remote Port: . . . . . 10/100 baseT TCP/IP  
 Remote Connector: . . . . . RJ-45  
 Web Interface: . . . . . accessible with any browser

Adapted Power Supply: . . . . . Switching Power Supply  
 Power Consumption: . . . . . 22 W (@ FLM 109W HD)  
 Mains Voltage: . . . . . AC 100-240 V ±10%, 50-60 Hz  
 Mains Connector: . . . . . IEC-320 3pin  
 Power Safety: . . . . . ground on frame

Housing: . . . . . full lightweight metal  
 Frame Color: . . . . . coated RAL 7016  
 Front Cover: . . . . . solid aluminum faceplate  
 Front Color: . . . . . black anodized  
 Panel Protection: . . . . . non-glare anti-reflective glass filter  
 Dimensions: . . . . . 222 (W) x 176 (H) x 90 (D) mm  
 Weight: . . . . . 2,8 kg  
 19" Rack Mounting: . . . . . rack mount kit to mount 2x FLM108

Environment: . . . . . 0 to +45°C, operation  
 Storage: . . . . . -30 to +60°C, 5 to 90% humidity  
 Certification: . . . . . CE, EN 50082-2, EN 55022

Accessories: . . . . . IR Remote, manual  
 Options: . . . . . analog HD Component Inputs,  
 3G-SDI 4:2:2/4:4:4 SMPTE 424/425M,  
 tiltable desktop stand,  
 twin 19" 4 RU rack mount kit

Interface Type: . . . . . TAMUZ FALCON  
 Interface Characteristic: HDTV MultiFormat  
 Image Processing: . . . . . scanning free scalable to any ratio,  
 HDTV native 4:2:2 10 to 8 bit dithering  
 Video Processing: . . . . . HiRes digital adaptive Comb Filter,  
 HiRes digital pixel mapping  
 Processing Times: . . . . . min. 1 field@lmode, 1 frame@ Pmode  
 Serial Digital Processing: native SMPTE 292M or 352M  
 Aspect Ratio: . . . . . 16:9, full image as standard  
 Under-/Overscan Mode: Yes  
 Markers: . . . . . Center, SafeArea, SafeTitle, 4:3 SD,  
 Academy, CinemaScope, User  
 IMD Function: . . . . . UMD, Timecode, Tally  
 Operation: . . . . . OSD Menu  
 Remote Operation: . . . . . IR remote, RS 232, TCP/IP 10/100

SD/HD-SDI Inputs: . . . . . 3x 10 bit, 1.5 Gbit/s  
 800 mVpp, SingleLink, 4:2:2  
 SD/HD Formats: . . . . . SMPTE 260M / 274M / 269M / 352M  
 1080i @ 30 / 29.97 / 25  
 1080p @ 30 / 29.97 / 25 / 24 / 23.98  
 720p @ 60 / 59.97 / 50  
 576i @ 25  
 480i @ 30

SD/HD-SDI Output: . . . . . 1x 10 bit, 1.5 Gbit/s, 4:2:2  
 SD/HD-SDI Impedance: 75 Ohm terminated  
 SD/HD-SDI Connector: . . . . . BNC 75 Ohms type

Graphic analog Input: . . . . . 1x W-XGA 1366 x 768, native  
 Graphic digital Input: . . . . . 1x DVI-D 1366 x 768, native,  
 accepts HDMI (non-HDCP) signals via  
 HDMI/DVI adapter

Graphic Formats: . . . . . CGA, EGA, VGA, SVGA, W-SVGA, XGA,  
 W-XGA, SXGA, W-SXGA, UXGA, W-  
 UXGA, MAC, Hercules and more

Sync Mode: . . . . . HV, RGsB, RGBS, composite  
 V-Sync: . . . . . Vmin = 23 Hz, Vmax = 110 Hz  
 H-Sync: . . . . . Hmin = 15 kHz, Hmax = 85 kHz  
 Graphic Connector: . . . . . Sub-D 15pin HD  
 DVI Connector: . . . . . DVI-D 28pin

Composite Video Input: 2x 1 Vpp, 5 MHz ±0.2 dB  
 Video Sync: . . . . . composite  
 Video S/N: . . . . . >65 dB  
 Video Standards: . . . . . 625/50, 525/60, auto detection  
 WSS Detection: . . . . . at PAL  
 Impedance: . . . . . 75 Ohm active loop through  
 Video Connector: . . . . . BNC 75 Ohms type

Component Input: . . . . . 1x 700 mVpp, 30 MHz ±1.5 dB  
 Component Formats: . . . . . RGB/YUV  
 Component HD: . . . . . 1080i60, 1080i50, 1080p60, 1080p50  
 Component SD: . . . . . 625i50, 525i60  
 Component Sync: . . . . . composite, Sync on Green  
 Component S/N: . . . . . >60 dB  
 Component Impedance: 75 Ohm terminated  
 Component Connector: BNC 75 Ohm

The GREY OWL monitors are available in various screen sizes from 8.4" up to 32"W. All monitors are equipped with the Automatic Alignment and Calibration feature (AAC) using a color analyzer probe. The integrated TCP/IP port allows remote control by the MRC software.

Handmade In Germany

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