

TAMUZ
MONITORS

BLACK MILAN series

Hybrid MultiView Broadcast Monitors



*High-quality multi-format MultiView Broadcast Video Monitors,
for SD and HDTV applications*



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



***It's Time to Change to the
TAMUZ Digital Broadcast Monitors
for your SDTV or HDTV Control Desk or OB-Van***



*Customized Monitor Wall in an OB truck
built with **BLACK MILAN QLM 124W** and **SPARROWHAWK LSM 124W HD***

***High Quality LCD Monitors for MultiView applications with Ethernet Remote Control
Integrated, MultiFormat MultiView Monitors for SD / HD
Display size from 19"W, 24"W up to 37"***

BLACK MILAN The Hybrid MultiView Broadcast Monitors

Hybrid integrated MultiView application with FullHD Monitors

Automatic Alignment and Calibration (AAC)

Four auto-detect SD/HD-SDI or analog inputs as model QLM

Four auto-detect SD/HD-SDI or analog plus 5th SD/HD-SDI input as model QCM

10 bit resolution for digital inputs

MultiView processing delay 1 frame

Embedded Audio Metering, 8 channels per input

Free layout configuration of video, borders, level meters and more,

storable and recallable as four individual setup's

Dynamic and static UMD support, NTP timecode and Clocks

On screen alarms for audio and video

Fault detection and notification via SNMP

MultiColor Tally for each input

TCP/IP, USB and RS422 remote, WINDOWS software for setup

QLM/QCM 119W is rack mountable, all models have VESA compatible mounting



Alignment and Calibration
functionality in the **BLACK MILAN** series
using the AAC probe PM 5639



Four universal SD/HD-SDI Inputs
with loops and analog CCVS capability.
Two TCP/IP ports for MultiViewer
and Monitor remote
in the **BLACK MILAN** series



Monitors with built-in MultiView Processor

The **BLACK MILAN** series is applicable as a MultiView Monitor. The processor is built-in. All **BLACK MILAN** series monitors are equipped with universal inputs auto detecting analog composite and digital SD and HD signals. The multiviewer layout is configurable by the user and can be stored as one of the four presets.



- Broadcast Quality video interface, showing a MultiImage or one full video image at 19W, 24W, 32W or 37W screens
- High-resolution active matrix TFT LCD color displays
- Wide viewing angles, "norm" brightness (80 cd/m²) or higher brightness (>250 cd/m²) adjustable and high contrast
- 16:9 aspect ratio mode, 4:3 selectable for each input
- MultiSync and MultiFormat capability
- Internal ITU-R601 / R709 video signal processing
- MultiView processing time 1 frame
- Four looped video inputs for analog CCVS and/or SD/HD-SDI
- The QCM version has additional a 5th SD/HD-SDI input for displaying the image unprocessed in 1:1 mode
- Audio Level Meter, 8 channel per input
- Supports dynamic and static UMD insertions
- Realtime clock as analog or digital image, LTC sync
- Professional and reliable input connectors
- Direct access keys for input selection and quad presets
- OSD monitor and multiviewer menu for individual setups
- 2x addressable 10/100 baseT TCP/IP port for remote
- 1x USB port for firmware upload
- OnScreen Tally, GPI/O port for 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
- Low power consumption, powered by universal power supplies



Free Windows software for setup

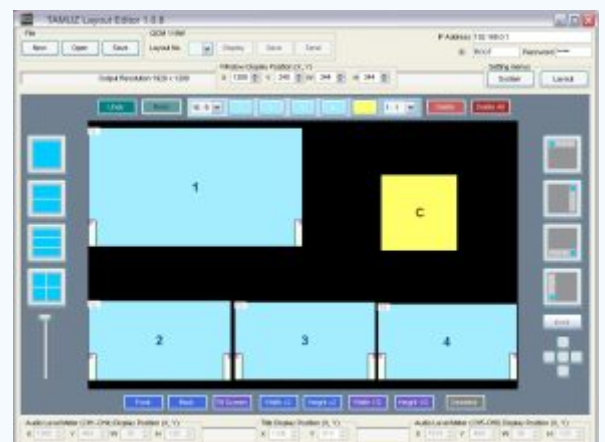
The **MILAN** software is developed to configure the layout and setup of **TAMUZ MultiView Monitors** remotely.

The screenshot on the right shows how to configure the **BLACK MILAN QCM/QLM** monitors.

Radio buttons and pull-down lists allows access to all features and functions of the monitors. The user can arrange and scale the video image on the desktop to create his own layout.

Each input signal can have individual borders, UMD's or audio level meters, as overlay or beside the video image.

An additional streaming feature transmits the video signals in the layout of the setup at the ethernet port.





Hybrid MultiView Broadcast Monitor

The **BLACK MILAN** model **QLM 119W** is a High Quality LCD Monitor equipped with four inputs and integrated MultiView processor, capable to accept any analog or digital SD or HD format. The **BLACK MILAN** model **QCM 119W** has additional a 5th direct to view SD/HD-SDI input. Regarding the compact size the QCM / QLM 119W can be mount in a 19" rack using 8 RU.

Technical Specifications:

Model: **QCM / QLM 119W**

Screen Type: active matrix color TFT, ISP technology
 Screen Size: 19" wide
 Screen Format: 16:10 native aspect ratio
 Pixel Resolution: 1440 x 900 RGB dots
 Screen Resolution: 96 dpi
 Color Resolution: 16 million colors
 Color Temperature: 6504°K nominal
 Color Temp. Range: 3200 to 9300 °K select and adjustable
 Luminance: max. 300 cd/m2
 Contrast: 500:1
 Response Time: 8 ms, typical
 Viewing Angle: ±80° horizontal, ±80° vertical
 Backlight: multiple CCF Lamps
 Backlight Lifetime: >50.000 h's
 Screen Classification: A Grade
 Screen Certification: ISO 13406-2, Cl. 2

Interface Type: TAMUZ "MILAN"
 Interface Characteristic: Broadcast MultiFormat MultiViewer
 Image Processing: scanning free scalable to any ratio
 Video Processing: HiRes digital adaptive Comb Filter
 Serial Digital Processing: native 4:2:2, 10 bit dithering
 Aspect Ratio: 16:9 normal, 4:3 selectable
 Operation: OSD Menu, remote controlable
 Remote Operation: TCP/IP, IR Controller, RS422, USB
 AAC Port: Port for probe PM5639/T, K-10, CA200 or others at front

SD/HD-SDI Inputs: 10 bit, 1.5 Gbit/s
 800 mVpp, 4:2:2
 SD/HD Standards: SMPTE 260M / 274M / 269M / 352M
 SD/HD-SDI Impedance: 75 Ohm terminated
 SD/HD-SDI Connector: BNC 75 Ohms type

SD/HD Formats: 1080i @ 30 / 29.97 / 25
 1080p @ 30 / 29.97 / 25 / 24 / 23.98
 720p @ 60 / 59.97 / 50
 576i @ 25
 480i @ 30
 Composite Video Input: 1 Vpp, 5 MHz ±0.2 dB
 Video Standards: 625/50, 525/60, auto detection

Tally Light: embedded video insertion
 Tally Feature: closed contact at GPI/O port
 Tally Connector: Sub-D 25pin

Power Requirements: DC 12 V +10% / -10%
 Power Connector: XLR-4M
 Power Consumption: max. 80 W
 Power Safety: ground on frame
 External Power Supply: Switching Power Supply
 External Voltage: AC 100-240 V ±10%, 50-60 Hz
 Mains Connector: IEC-320 3pin
 DC Output Connector: XLR-4F

Housing: full lightweight metal
 Frame Color: coated RAL 7016
 Panel Protection: non-glare anti-reflective glass filter
 Dimensions: 438 (W) x 352 (H) x 142 (D) mm
 Weight: 8,5 kg
 VESA Mounting: VESA100 threads at rear

Environment: 0 to +50°C, operation
 Storage: -30 to +60°C, 5 to 95% humidity
 Certification: CE, EN 50082-2, EN 55022
 Accessories: Windows software for setup, 19" brackets, manual





Hybrid MultiView Broadcast Monitor

The **BLACK MILAN** model **QLM 124W** is a High Quality LCD Monitor equipped with four inputs and integrated MultiView processor, capable to accept any analog or digital SD or HD format. The **BLACK MILAN** model **QCM 124W** has additional a 5th direct to view SD/HD-SDI input. Regarding the compact size the QLM/QCM 124W can be mount at a 19" rack using 9 RU.

Technical Specifications:

Model: **QCM / QLM 124W**

Screen Type: active matrix color TFT, ISP technology

Screen Size: 24" wide

Screen Format: 16:10 native aspect ratio

Pixel Resolution: 1920 x 1200 RGB dots

Screen Resolution: 94 dpi

Color Resolution: 16 million colors

Color Temperature: 6500°K nominal

Color Temp. Range: 3200 to 9300 °K select and adjustable

Luminance: max. 400 cd/m2

Contrast: >800:1

Response Time: 12 ms, typical

Viewing Angle: ±80° horizontal, ±80° vertical

Backlight: multiple CCF Lamps

Backlight Lifetime: >50.000 h's

Screen Classification: A Grade

Screen Certification: ISO 13406-2, Cl. 2

Interface Type: TAMUZ "MILAN"

Interface Characteristic: Broadcast MultiFormat MultiViewer

Image Processing: scanning free scalable to any ratio

Video Processing: HiRes digital adaptive Comb Filter

Serial Digital Processing: native 4:2:2, 10 bit dithering

Aspect Ratio: 16:9 normal, 4:3 selectable

Operation: OSD Menu, remote controllable

Remote Operation: TCP/IP, IR Controller, RS422, USB

AAC Port: Port for probe PM5639/T, K-10, Ca200 or others at front

SD/HD-SDI Inputs: 10 bit, 1.5 Gbit/s

. 800 mVpp, 4:2:2

SD/HD Standards: SMPTE 260M / 274M / 269M / 352M

SD/HD-SDI Impedance: 75 Ohm terminated

SD/HD-SDI Connector: BNC 75 Ohms type

SD/HD Formats: 1080i @ 30 / 29.97 / 25

. 1080p @ 30 / 29.97 / 25 / 24 / 23.98

. 720p @ 60 / 59.97 / 50

. 576i @ 25

. 480i @ 30

Composite Video Input: 1 Vpp, 5 MHz ±0.2 dB

Video Standards: 625/50, 525/60, auto detection

Tally Light: embedded video insertion

Tally Feature: closed contact at GPI/O port

Tally Connector: Sub-D 25pin

Internal Power Supply: Switching Power Supply

External Voltage: AC 100-240 V ±10%, 50-60 Hz

Power Consumption: max. 120 W

Power Safety: ground on frame

Mains Connector: IEC-320 3pin

Housing: full lightweight metal

Frame Color: coated RAL 7016

Panel Protection: non-glare anti-reflective glass filter

Dimensions: 550 (W) x 398 (H) x 160 (D) mm

Weight: 18 kg

VESA Mounting: VESA100 threads at rear

Environment: 0 to +50°C, operation

Storage: -30 to +60°C, 5 to 95% humidity

Certification: CE, EN 50082-2, EN 55022

Accessories: Windows software for setup, manual

Options: IR remote, flexible desktop stand FDS2, 19" rack mount kit XW-RK





Hybrid MultiView Broadcast Monitor

The **BLACK MILAN** model **QLM 137W** is a High Quality LCD Monitor equipped with four inputs and integrated MultiView processor, capable to accept any analog or digital SD or HD format.

The **BLACK MILAN** model **QCM 137W** has additional a 5th direct to view SD/HD-SDI input.

All monitors are equipped with 2x VESA100 threads. An adapter to industry mounts is available.

Technical Specifications:

Model: **QCM / QLM 137W**

Screen Type: active matrix color TFT, MVA technology

Screen Size: 37" wide

Screen Format: 16:9 native aspect ratio

Pixel Resolution: 1920 x 1080 RGB dots

Screen Resolution: 64 dpi

Color Resolution: 16 million colors

Color Temperature: 6504°K nominal

Color Temp. Range: 3200 to 9300 °K select and adjustable

Luminance: max. 700 cd/m2

Contrast: >1.000:1

Response Time: 8 ms, typical

Viewing Angle: ±85° horizontal, ±85° vertical

Backlight: multiple CCF Lamps

Backlight Lifetime: >50.000 h's

Screen Classification: A Grade

Screen Certification: ISO 13406-2, Cl. 2

Interface Type: TAMUZ "MILAN"

Interface Characteristic: Broadcast MultiFormat Quad

Image Processing: scanning free scalable to any ratio

Video Processing: HiRes digital adaptive Comb Filter

Serial Digital Processing: native 4:2:2, 10 bit dithering

Aspect Ratio: 16:9 normal, 4:3 selectable

Operation: OSD Menu, remote controllable

Remote Operation: TCP/IP, IR Controller, RS422, USB

AAC Port: Port for probe PM5639/T, K-10, CA200 or others at front

SD/HD-SDI Inputs: 10 bit, 1.5 Gbit/s

. 800 mVpp, 4:2:2

SD/HD Standards: SMPTE 260M / 274M / 269M / 352M

SD/HD-SDI Impedance: 75 Ohm terminated

SD/HD-SDI Connector: . BNC 75 Ohms type

SD/HD Formats: 1080i @ 30 / 29.97 / 25

. 1080p @ 30 / 29.97 / 25 / 24 / 23.98

. 720p @ 60 / 59.97 / 50

. 576i @ 25

. 480i @ 30

Composite Video Input: 1 Vpp, 5 MHz ±0.2 dB

Video Standards: 625/50, 525/60, auto detection

Tally Light: embedded video insertion

Tally Feature: closed contact at GPI/O port

Tally Connector: Sub-D 25pin

Internal Power Supply: . . Switching Power Supply

External Voltage: AC 100-240 V ±10%, 50-60 Hz

Power Consumption: max. 250 W

Power Safety: ground on frame

Mains Connector: IEC-320 3pin

Housing: full lightweight metal

Frame Color: coated RAL 7016

Panel Protection: non-glare anti-reflective glass filter

Dimensions: 890 (W) x 530 (H) x 160 (D) mm

Weight: 32 kg

VESA Mounting: 2x VESA100 threads at rear

Environment: 0 to +50°C, operation

Storage: -30 to +60°C, 5 to 95% humidity

Certification: CE, EN 50082-2, EN 55022

Accessories: Windows software for setup, manual

Options: IR remote, desktop stand, universal mounting kit



Where to buy

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MONITORS**

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