The new QS Quad Monitors with WFM

High resolution IMD and tally

LTC

Clock

Waveform, for YCbCr vectorscope

Improved VUmeters

The new QS, what else could you ask for?

The new QS from KROMA, with built-in quadsplit and 10 inputs, is now enhanced with waveform and vectorscope tools, high resolution IMD (In-Monitor Display) and VU-meters, on-screen clock and the option to turn 4 video inputs into outputs by menu.
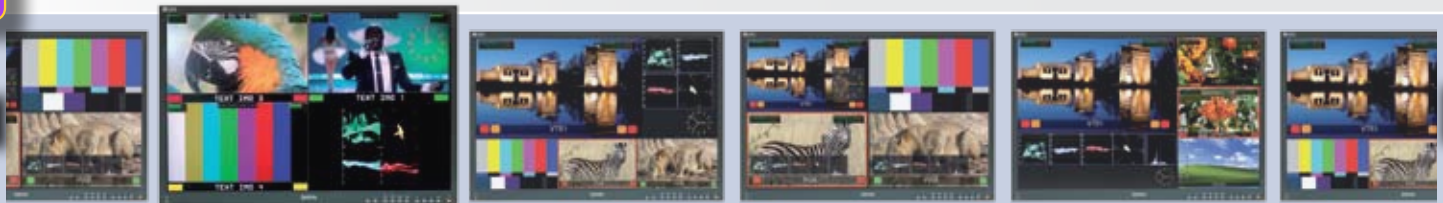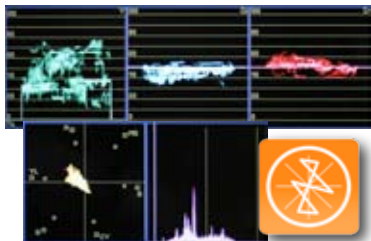

MAIN FEATURES

2 DVI-I inputs (YPbPr, VGA and DVI video modes) and 8 autodetecting video inputs (composite and SD-SDI signals). These 8 inputs can be easily turned into 4 multistandard inputs + 4 digital outputs on the on-screen menu.

HD is optional for the multiformat inputs and can be included at the time of purchase or activated by license later.

New tools have been included to assist in the signal monitoring, such as independent waveforms for Y, Cb and Cr, vectorscope and histogram, displayed in different colours for a quick identification of each function.

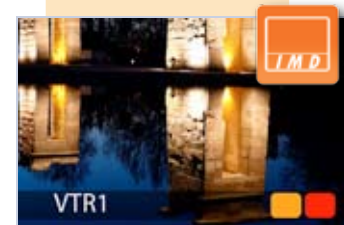These tools may be overimposed on the signal or displayed on a different quadrant so that no picture is hidden.

In addition to the standard quadsplit mode with four identical windows, there are different layouts available with several combinations of sizes and positions, along with the WFM tools.

One main large window can be combined with 3 smaller signals on both sides, on top or bottom. The different layouts, as well as which of the 10 inputs is displayed as main screen, may be easily selected in the on-screen menu.

In any of the layouts, it is possible to switch any of the signals to full screen mode just by pressing the corresponding key in the front panels.

The QS SERIES units can be used to monitor both analogue and digital audio: any of the 4 analogue stereo inputs or the built-in audio de-embedder, can be fed to the on-screen VU-meters (with 4 groups/16 channels per window); or listened thorugh the built-in speaker or headphones.

Each of the video signals can count with a dynamic in-monitor display, under serial protocol, to keep the different video signals correctly identified. A static IMD can also be easily configured for each window.

On-screen tricolour tallys are available (through serial protocol, contact closure and voltage).

Independent alarms for each of the quadrants may be set, with four different event types: out of sync, frozen picture, black picture and audio (presence or absence for each channel). The alarm is displayed on screen with a frame around the picture, with different colours depending on the event type.

OTHER FEATURES

IPS The QS series monitors displays feature IPS (In-Plane Switching) technology, improving viewing angles and colour reproduction over regular LCD displays.

Broadcast colorimetry
One major advantage over multiviewing systems when compared to built-in quadsplits is colorimetry control. Unlike most industrial and consumer monitors, commonly used in multiviewing systems, each of the three colour components, Red, Green and Blue, can be adjusted indepently to match an exact colorimetry setting.

LTC and clock
The LTC signalling can be extracted from the SDI signal and showed on screen; the time can be set and a clock displayed on screen.

KROMA MONITOR CONTROLLER

KROMA QS monitors can work as a modular multiviewing system just by adding several units together to build a monitoring wall. With 4 signals per unit at once, the system would require as many units as to show the whole range of video signals in the system (i.g., 5 QS monitors would be used for 20 signals). It is possible to mix different sizes together, and even combining QS monitors with 7000/4000 series monitors for PVW and PGW, since the screens and colorimetry settings are the same for both series.

To increase the possibilities of this modular system, KROMA has developed its Monitor Controller. This PC-based software provides remote access to all the functions in the monitors from a computer, just by using a regular Ethernet network and the network ports in the monitors (both QS and 7000 series). This way, not only basic functions such as brightness or contrast of the screens, but also advanced features such as In-Monitor displays or the Vu-meters, may be conveniently configured from the control desk.

In addition to the standard functions in the monitors, the KROMA Monitor Controller software can set a log of all events and alarms in the system, with details of the monitor and quadrant, as well as date and time of the event. These functions take QS series very close to a dedicated multiviewing system, with additional advantages: being based on broadcast monitors, colorimetry is easily managed and signal delay is as low as possible, just the same as in single monitors system.

SPECIFICATIONS

Model #		QS7018	QS7024
Size		18.5"	24" (16:10 native)
Resolution		1366x768 (16:9 native)	1920x1200
Active Area		409.8x230.4mm	518x324mm
Viewing Angle		178° H/V	178° H/V
MTTF		50,000 Hours	50,000 Hours
Brightness		250 cd/m²	400cd/m²
Contrast		1000:1	1000:1
Response Time		6 ms	6ms
Inputs			
DVI-I	Connector	2xDVI-I	
	YPbPr	1080i (60,59.95, 50), 576@50i, 480@60i	
	RGB (VGA)	640x480, 800x600, 1024x768, 1280x1024, 1600x1200	
	DVI Graphic Mode	640x480, 800x600, 1024x768, 1280x1024	
	DVI Video Mode	1920x1080(50i, 60i, 50p, 60p)	
CVS/SD/ HD-SDI	Connector	8xBNC (autosensing) or 4xBNC (selectable by menu)	
	SMPTE-170M	PAL/NTSC/SECAM	
	SMPTE-259M	576i@50, 480i@60	
	SMPTE-296M	720p(60/59.94/50)	
	SMPTE-274M	1080p(30/29.97/25/24/23.98), 1080sF(24/23.98), 1080i(60/59.94/50)	
	SMPTE-260M	1035i(60/59.94)	
Audio		SDI embedded audio	
		4ch. analogue audio (SUB-D26 connector)	
In-Monitor display		RJ-45 connector (TSL 3.1 protocol,…)	
Remote control		Ethernet	
Tally		SUB-D26 connector (contact closure and voltage)	
		RJ-45 connector (serial protocol)	
LTC/VITC/VITC2		SDI-embedded (digital)	
Firmware updates		USB B-Type	
GPIO		RJ-45	
Outputs			
SD/HD-SDI	Connector	4xBNC (selectable by menu)	
	SMPTE-259M	576i@50, 480i@60	
	SMPTE-296M	720p(60/59.94/50)	
	SMPTE-274M	1080p(30/29.97/25/24/23.98), 1080sF(24/23.98), 1080i(60/59.94/50)	
	SMPTE-260M	1035i(60/59.94)	
Audio		Front headphone output (Jack connector)	
		Built-in speaker	
		VU-meters	
Tally		On-screen	
In-Monitor display		On-screen	
		RJ-45 connector (loop output)	
General			
Dimensions		265 x 446.5 x93 mm	370 x 552 x 95 mm
Weight		5.7 Kg	6.8 Kg
Power		External PSU 100-240 VAC	Internal PSU 100-240 VAC
Power consumption		57W	75W
Ordering info			
Model #		QS7018	QS7024
Activation codes		QSHD: HD activation for 8 SDI inputs	
Accesories		QS6018X80: rack mounting kit MS2300X80: articulated desktop adaptor MS2304X50: fixed desktop support	LM6024X80: rack mounting kit MS2300X80: articulated desktop adaptor MS2304X50: fixed desktop support

Specifications may change without prior notice

FRONT AND REAR VIEWS

QS7018

QS7024