

### Multi-layer hi-resolution seamless matrix scaler with 2 mirrored DVI / analog outputs and a 3G-SDI video output



#### Flexibility and Versatile Connectivity

The **SmartMatrix<sup>2</sup>** is a powerful hi-resolution true seamless matrix scaler featuring 10 seamless inputs and 16 input connectors (four HDMI, four DVI, four 3G-SDI and four universal analog). The **SmartMatrix<sup>2</sup>** offers two independent program outputs with mirrored DVI and VGA connectors. It also supports advanced audio inputs and outputs functionalities and includes 3G-SDI and analog outputs useable as video output or Program clone.

#### Quality without Compromise

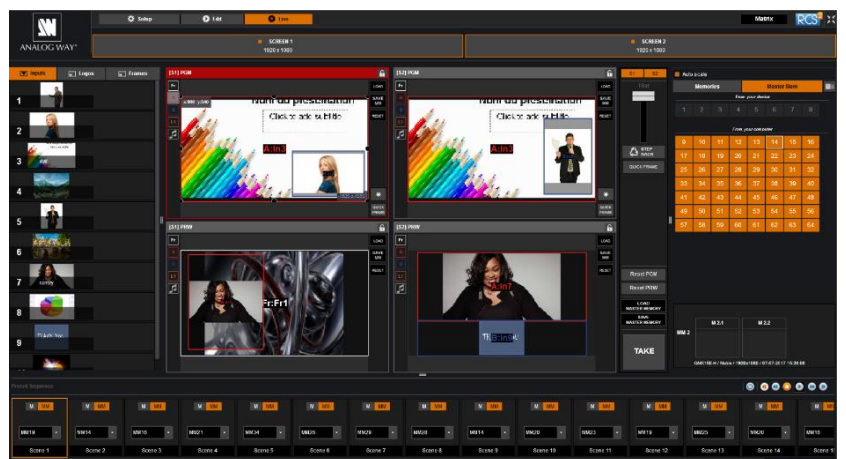
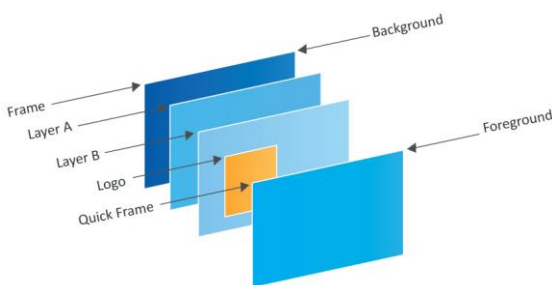
Based on the extremely reliable and cost-effective MIDRA™ platform, the **SmartMatrix<sup>2</sup>** offers ultra-low latency image processing, uncompromising video quality, true seamless switching and advanced video effects for elegant AV presentations, which makes it an ideal solution for live events, fixed installations, houses of worship and educational facilities.

#### Smart functionalities

The **SmartMatrix<sup>2</sup>** has been designed with innovative functionalities, including some advanced features inherited from the LiveCore™ series. The **SmartMatrix<sup>2</sup>** can display two live layers on each output, with background and foreground positions. Thanks to the new Quick Frame function, a foreground frame can quickly hide all other layers when necessary. To fit any display resolution, including non-standard formats like LED walls, the **SmartMatrix<sup>2</sup>** manages custom output formats. Major new assets also include advanced management of audio to easily embed or de-embed digital audio on HDMI and DVI-D connectors, ensuring better processing and quality of the video and audio mix. For easy routing of audio signals, some functions such as Fast Routing and Audio Breakaway are available.

#### Powerful and Flexible Control Options

The **SmartMatrix<sup>2</sup>** has been designed to be entirely operated from the easy-to-use front panel. Each MIDRA™ model can also be easily controlled using the intuitive drag & drop software user interface: the RCS<sup>2</sup>. The **SmartMatrix<sup>2</sup>** offers IP (Ethernet) control via a standard TCP/IP socket connection and an RS-232 serial interface supported by all major third-party control systems. Additionally, the **SmartMatrix<sup>2</sup>** can be controlled by a comprehensive range of remote control panel options such as the **RK-350** keypad or the **Shot Box<sup>2</sup>**.



#### SmartMatrix<sup>2</sup> at a glance

- ▶ Based on the Midra™ platform
- ▶ 10x2 seamless scaled matrix
- ▶ Heavy-duty design for incredible reliability
- ▶ High quality, ultra-low latency video processing
- ▶ Versatile Connectivity
- ▶ Advanced audio management
- ▶ User-friendly and intuitive graphic interface

	QVU150-3G	QMX150	PLS350-3G	SMX250	SPX450	EKS550
Operating modes	1	1	2	1	2	3
Inputs	8	8	8	10	10	10
Outputs	1 + 1 Preview	2	2	2	2	2
Video Output	1	0	1	1	1	1
Transitions & Effects	+	+	+	++	+	++
Live Layers (max)	1 + 1 keyed	1 + 1 keyed	2	2	3	4

## KEY FEATURES

**MIDRA™ platform:** uncompromised processing and manufacturing quality

**1 operating mode:** Native Matrix

### 10 seamless inputs

Capability to switch between any input plugs (16 input plugs available)

**2 outputs:** Output#1 and Output#2

**Video output:** Digital SD/HD TV (3G-SDI) and Analog SD TV (CVBS, YPbPr)

### High performance video processing:

- Very fast seamless switching
- Ultra-low latency processing
- Chroma/Luma Key and Titling
- Ability to modify the Program in real time without using the Preview
- Custom output formats
- Advanced de-interlacing processing
- New freeze features (input/layer/screen)

### Advanced Audio Management:

- Embed/De-Embed audio on all plugs
- Breakaway Audio mode
- Top Layer mode
- Balanced Stereo audio on all outputs
- Fast Routing mode
- Delay compensation (manual up to 80ms or auto)

### Enhanced Layer Processing:

- Up to 2 layers on Background Frame
- Live Layers fully resizable
- Pan & Zoom resizing up to 1000%
- Open/Close animation
- Dynamic layers (Moving from A to B) with Flying, Zooming or Cropping functions
- Border & Shadow
- Transitions: Fade, Cut, Wipe, Slide, Stretch, Depth, Circle & Flip

**Quick Frame mode:** Instantly display a stored frame above all layers

**Internal test patterns:** Select between 9 available test patterns

**EDID Management:** Management on 6 inputs; Ability to read & display outputs EDIDs

**HDCP Compliant:** Enable/Disable the HDCP (*if the display is not compliant, the output image could be disabled*)

### Memories:

- 8 Memory Presets per output and up to 64 via RCS<sup>2</sup>
- 8 Full frames
- 8 logo Memories (including one animated Logo)

**RCS<sup>2</sup>:** Remote Control Software for Windows and Mac

### Dimension (in Rack Units - RU)

- ▶ 2RU

### Dimensions (without rack ears and rear rack mount)

- ▶ W 17.28" x H 3.46" x D 14.78"
- ▶ L 439.5 mm x H 88 mm x P 377 mm

### Dimensions (with handles)

- ▶ W 19" x H 3.46" x D 15.77"
- ▶ L 482.1 mm x H 88 mm x P 402 mm

### Weight without accessories

- ▶ 6.4 kg / 14.1 lbs

### Shipping weight accessories included

- ▶ 8.9 kg / 19.62 lbs

### Operating conditions

- ▶ Temperature: 0 to 40°C (32 to 104°F)
- ▶ Humidity: 10% to 80%, non-condensing

### Thermal dissipation

- ▶ 239 BTU/hr

### Noise (@1,6m height @25°C)

- ▶ Front: 39 DBa@1m
- ▶ Rear: 39 DBa@1m

### Warranty

3-year warranty on parts and labor back to factory

### Power Supply

- ▶ 100-240 VAC 50/60Hz 2,5A
- ▶ Fuse cartridge F4AH 250VAC 5x20mm
- ▶ Max consumption: 70 W

### Safety Compliance

- ▶ IEC/UL/EN 60950-1, CSA22.2#60950-1, ETL Listed (US & Canada)

### Supplied with

- ▶ 1 x Power supply cord
- ▶ 1 x Pair of front handles + screws
- ▶ 1 x Ethernet cross cable (for device control)
- ▶ 6 x MCO 5 pin connector
- ▶ 1 x Quick Start Guide including safety instructions\*

## INPUTS

10 seamless inputs, 16 total input plugs

4 x DVI-D up to 2048x1152@60Hz

4 x HDMI up to 2048x1152@60Hz

4 x Universal Analog up to 2048x1152@60Hz

4 x 3G/HD/SD-SDI up to 2K@60Hz

## OUTPUTS

2 outputs with 2 plugs per output

2 x DVI up to 2048x1152@60Hz

2 x Universal Analog up to 2048x1152@60Hz

1 x 3G-SDI up to 2K@60Hz, useable as video output or program clone

4 x BNC for Analog SD TV (CVBS, YPbPr) up to 625/576i

## AUDIO

5-pin MCO connectors: 4 for analog audio inputs and 2 for analog audio outputs

4 RCA connectors: 2 for S/PDIF audio inputs and 2 for S/PDIF audio outputs

### Input:

DVI (as HDMI) / HDMI / SDI Audio de-embedded

4 x Audio stereo Analog (Balanced/Unbalanced)

2 x S/PDIF (AES-3id compatible)

### Output:

DVI (as HDMI) Audio embedded

2 x Audio stereo Analog (Balanced/Unbalanced)

2 x S/PDIF (AES-3id compatible)

## STANDARDS

SMPTE: ST 259:2008, ST 260:1999, ST 274:2008, ST 292-1:2012, ST 296:2012, ST 424:2012, ST 428-19:2010

VESA: GTF1.1, CVT 1.1, DMT1.0 rev.12

## MATRIX MODE

Seamless switching on each output

1 Layer on Live Background on each output

Up to 2 Layers on Still Background on each output

## CONTROL

Full-featured Front Panel

RCS<sup>2</sup>: Remote Control Software with intuitive GUI

Orchestra<sup>2</sup>: Intuitive and ergonomic Controller

RK-350: Remote Keypad

SB80-2: Shot Box<sup>2</sup>


AMX/Crestron drivers

## OTHER FEATURES

DB9: RS232 for remote control

RJ45: Ethernet connection

\*All technical specifications and videos are available on [www.analogway.com](http://www.analogway.com)

 Specifications subject to change without prior notice

SMX250-EN-04/30/2018