

## Multi-layer hi-resolution mixer & seamless switcher with ten inputs and native matrix mode



### Flexibility and Versatile Connectivity

The **Saphyr** is a powerful multi-layer hi-resolution mixer and seamless presentation switcher featuring 10 seamless inputs and 16 input connectors (four HDMI, four DVI, four 3G-SDI and four universal analog). The **Saphyr** has two outputs with mirrored DVI and universal analog connectors that can be configured either as Program & Preview or as two independent program outputs. 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

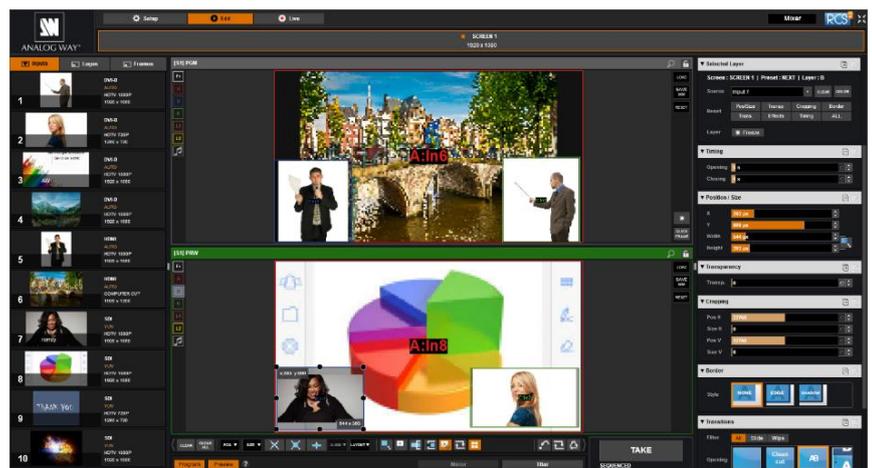
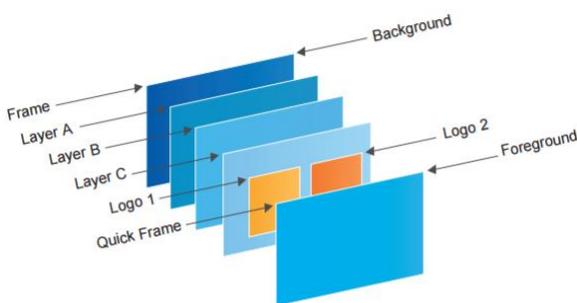
Based on the extremely reliable and cost-effective MIDRA™ platform, the **Saphyr** offers ultra-low latency image processing, uncompromising video quality, true seamless switching and advanced video effects for elegant AV presentations, which makes it an ideal solution for live events, fixed installations,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

### Smart functionalities

The **Saphyr** has been designed with innovative functionalities, including some advanced features inherited from the LiveCore™ series. The **Saphyr** can display three live layers, 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 **Saphyr** 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 **Saphyr** 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 user software interface: the RCS². The **Saphyr** 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 **Saphyr** can be controlled by a comprehensive range of remote control panel options such as the **RK-350** keypad or the **Shot Box²**.



### Saphyr at a glance

- ▶ Based on the Midra™ platform
- ▶ 2 operating modes: Seamless Mixer & Native Matrix
- ▶ Heavy-duty design for incredible reliability
- ▶ High quality, ultra-low latency video processing
- ▶ 3G-SDI inputs and outputs
- ▶ 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

**2 operating modes:** Seamless Mixer and Native Matrix

### 10 seamless inputs

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

**2 outputs:** Program/Output#1 and Preview/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 3 layers on Still Background
- Live layers fully resizable
- Pan & Zoom resizing up to 1000%
- Border & Shadow
- Dynamic layers (Moving from A to B) with Flying, Zooming or Cropping functions
- Direct Swap & Split functions
- Transitions: Fade, Cut, Wipe, Slide
- Open/Close animation

**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 14.77"
- ▶ L 439.5 mm x H 88 mm x P 376 mm

### Dimensions (with handles)

- ▶ W 19" x H 3.46" x D 15.76"
- ▶ L 482.1 mm x H 88 mm x P 401 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) / SDI 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

## OPERATING MODES

### Mixer mode:

Seamless switching with full preview with 1 layer

Up to 2 Layers on Live Background

Up to 3 Layers on Still Background

### Matrix mode:

Seamless switching

1 Layer on Live or Still Background

## 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