

# Pulse<sup>2</sup> - H

## Ref. PLS350-H



### Eight-input hi-resolution mixer & seamless switcher with two HDBaseT™ inputs and two mirrored HDMI / HDBaseT™ outputs

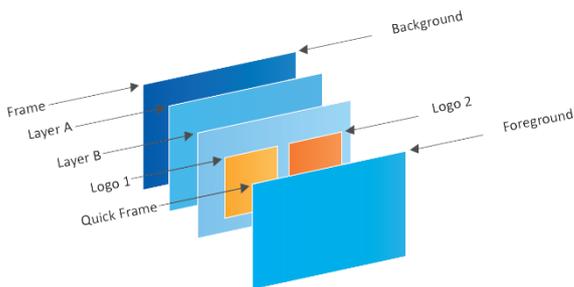


#### Flexibility and Versatile Connectivity

The **Pulse<sup>2</sup> - H** is a powerful multi-layer hi-resolution mixer and seamless presentation switcher featuring 8 seamless inputs and 12 input connectors (four HDMI, two DVI, two 3G-SDI, two HDBaseT™ and two universal analog). The **Pulse<sup>2</sup> - H** offers two outputs with mirrored HDMI and HDBaseT™ connectors that can be configured either as Preview & Program or as two independent program outputs (native matrix mode). It also supports advanced audio inputs and outputs functionalities and includes a 3G-SDI output useable as video output or Program clone.

#### Quality without Compromise

Based on the extremely reliable and cost-effective MIDRA™ platform, the **Pulse<sup>2</sup> - H** offers ultra-low latency image processing, uncompromising video quality, true seamless switching, custom output formats 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.

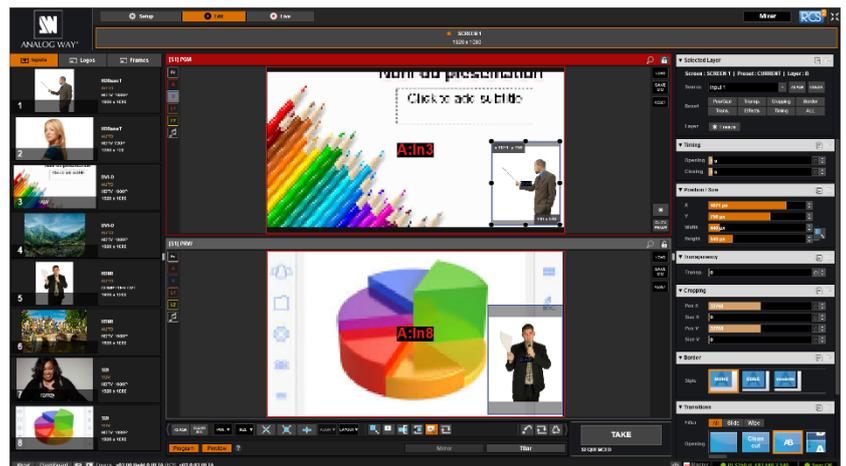


#### Simplified Integration with direct HDBaseT™ Compatibility

The **Pulse<sup>2</sup> - H** has been designed using HDBaseT™ Alliance specifications, ensuring interoperability with other HDBaseT™ certified products. It features two HDBaseT™ inputs with embedded audio, Ethernet and PoE+ support. The **Pulse<sup>2</sup> - H** also includes two HDBaseT™ outputs that can deliver digital video and embedded audio, with Ethernet pass through plus bidirectional RS-232 and IR signals up to 492 feet (150 meters) over a shielded CAT 5e/6 cable directly to HDBaseT™ enabled displays. This allows reducing installation cost and even greater flexibility for your integration requirements.

#### Powerful and Flexible Control Options

The **Pulse<sup>2</sup> - H** 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 RCS<sup>2</sup>. The **Pulse<sup>2</sup> - H** 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 **Pulse<sup>2</sup> - H** 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>**.



#### Pulse<sup>2</sup> - H 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
- ▶ Two HDBaseT™ inputs and two HDBaseT™ outputs
- ▶ Advanced audio management
- ▶ User-friendly and intuitive graphic interface

	QuickMatrix <sup>2</sup> - H	Pulse <sup>2</sup> - H	SmartMatrix <sup>2</sup> - H	Saphyr <sup>2</sup> - H
Operating modes	1	2	1	2
Inputs (HDBaseT™)	8 (2)	8 (2)	10 (4)	10 (4)
Outputs (HDBaseT™)	2 (2)	2 (2)	2 (2)	2 (2)
Video Output	1	1	1	1
Transitions & Effects	+	+	++	+
Live Layers (up to)	1 + 1 keyed	2	2	3

## KEY FEATURES

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

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

### 8 seamless inputs

Capability to switch between any input plugs (12 input plugs available)

**2 outputs:** Program/Output#1 and Preview/Output#2

**Video output:** Digital SD/HD TV (3G-SDI)

### HDBase™ plugs:

- 2 inputs with PoE+ (48V; 30W) and support of video, embedded audio and Ethernet pass-through

- 2 outputs with support of video, embedded audio, Ethernet, bidirectional RS232 and IR

- Point-to-point transmission up to 492ft (150m) with unshielded CAT 5e/6 cables with foil shielding twisted pair (ISO/IEC 11801 U/FTP)

- HDMI and HDBase™ outputs can output simultaneously

### 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 (up to 80ms or auto)

### Enhanced Layer Processing:

- Up to 2 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 17.71"
- ▶ L 439.5 mm x H 88 mm x P 450 mm

### Dimensions (with handles)

- ▶ W 19" x H 3.46" x D 18.70"
- ▶ L 482.1 mm x H 88 mm x P 475 mm

### Weight without accessories

- ▶ 7.2 kg / 15.87 lbs

### Shipping weight accessories included

- ▶ 10.2 kg / 22.49 lbs

### Operating conditions

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

### Thermal dissipation

- ▶ 529 BTU/hr

### Noise (@1,6m height @25°C)

- ▶ Front: 41 DBa@1m
- ▶ Rear: 41 DBa@1m

### Warranty

3-year warranty on parts and labor back to factory

### Power Supply

- ▶ 100-240 VAC 50/60Hz 3.2A
- ▶ Fuse cartridge F4AH 250VAC 5x20mm
- ▶ Max consumption: 155 W (with 2x24W PoE)

### Safety Compliance

- ▶ IEC/UL/EN 60950-1, CSA2.2#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)
- ▶ 8 x MCO 5 pin connectors
- ▶ 1 x Quick Start Guide including safety instructions\*

## INPUTS

8 seamless inputs, 12 total input plugs

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

4 x HDMI up to 2048x1152@60Hz

2 x Universal Analog up to 2048x1152@60Hz

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

2 x HDBase™ with PoE+ up to 2048x1152@60Hz

## OUTPUTS

2 outputs with 2 plugs per output

2 x HDMI up to 2048x1152@60Hz

2 x HDBase™ up to 2048x1152@60Hz

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

## 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:

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

1 Title on Live Background

1 Layer on Live Background

Up to 2 Layers on Still Background

### Matrix mode:

Seamless switching

1 Live Background

## CONTROL

Full-featured Front Panel

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

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

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