

LAWO

# SOLUTIONS FOR STATE OF THE ART RADIO



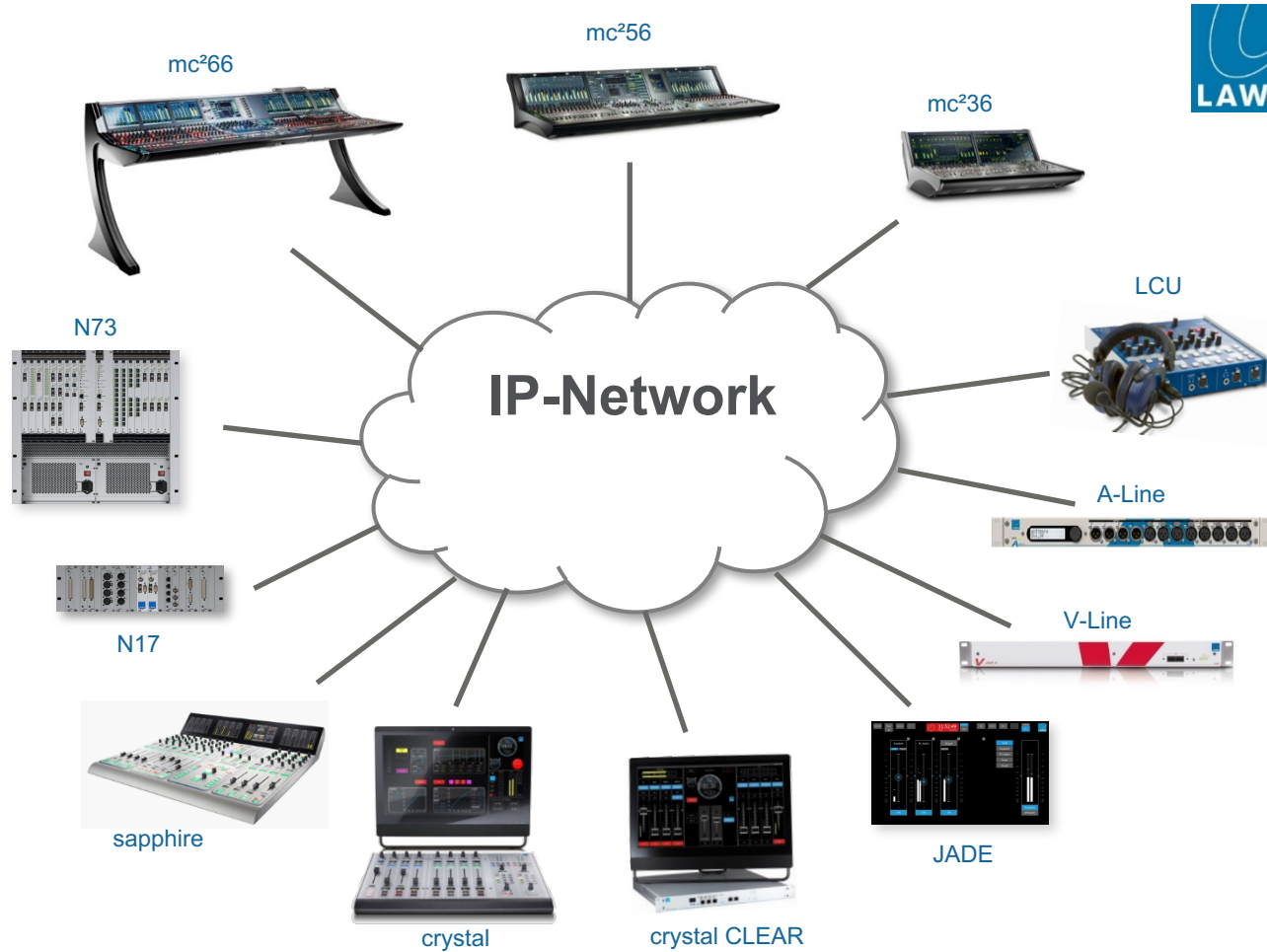


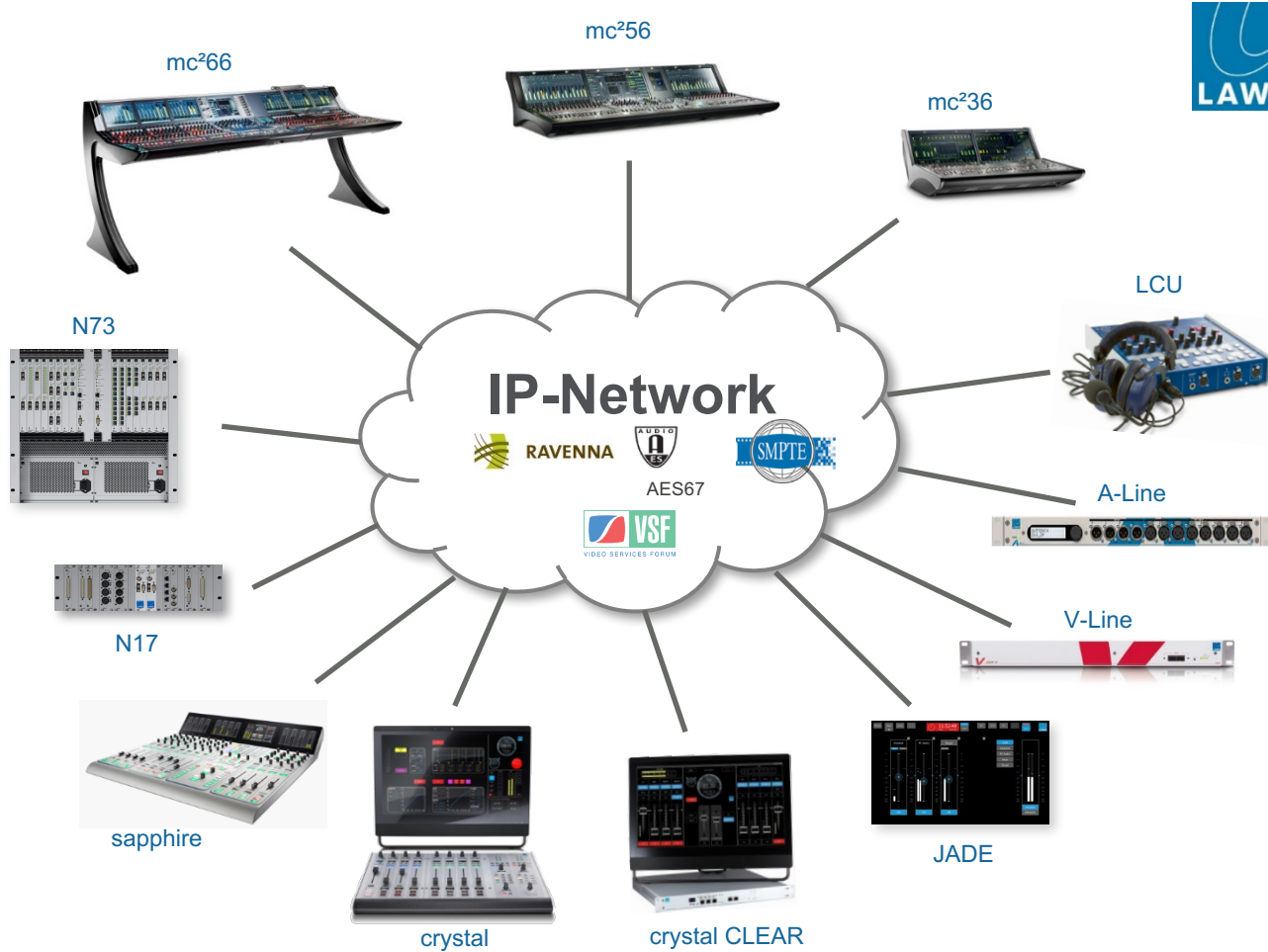
# Who Is Lawo?

Broadcast 3.0

A white cloud-shaped graphic with a grey outline and a subtle drop shadow, containing the text 'IP-Network' in bold black font.

**IP-Network**





# IP AUDIO NETWORKING

# mc<sup>2</sup> series / NOVA73



## FACTS

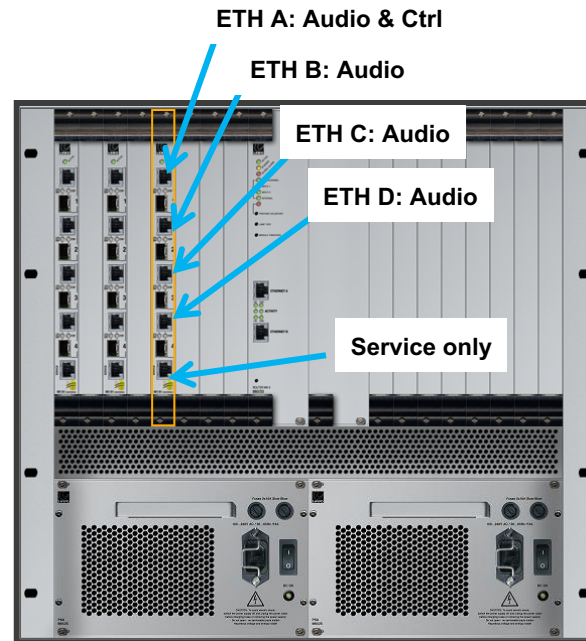
### RAVENNA 4-Port NOVA Extension card (981/61)

Channels: 512 in / 512 out in total  
(128 in / 128 out per port)

Connectivity: Backplane

Two working modes:  
RAVENNA Link (Point-to-Point)  
RAVENNA/AES67 (IP Layer 3)

Existing RAVENNA-Link installations can be upgraded to full RAVENNA/AES 67 with firmware update



# DALLIS INTERFACE



## FACTS

**RAVENNA/MADI DALLIS Mastercard (947/22)**

Channels: 128 in / 128 out

Two working modes:  
RAVENNA Link (Point-to-Point)  
RAVENNA/AES67 (IP Layer 3)

Existing RAVENNA-Link installations can be upgraded to full RAVENNA with firmware update



**RAVENNA**





# Nova17 / sapphire



RAVENNA EXTENSION CARD

## FACTS

### DALLIS RAVENNA Extension card (946/42)

Channels: 64 in/out or 8 in/out

Two working modes:

64ch. MAD1 stand-alone conversion

8ch. Backplane Mode



# Nova17 / sapphire



SAPPHIRE / NOVA17 DSP

RAVENNA EXTENSION CARD

## FACTS

**DALLIS RAVENNA Extension card  
(946/42)**

Channels: 64 in/out or 8 in/out

Two working modes:

64ch. MADI stand-alone conversion

8ch. Backplane Mode



# crystal mkII



**RAVENNA**

## FACTS

### CRYSTAL IO module (952/38)

Channels: 64 in/out or 8 in/out

Two working modes:

64ch. MADI conversion

8ch. Backplane Mode



# A\_\_mic8



## FACTS

RAVENNA/AES67 device

8 Mic, 4 Line Out

8 GPI in & 8 GPI Out

Power over Ethernet (PoE)

Cat5 (up to 100m/328ft) or  
Coax (up to 1000m/3280ft)



# RAVENNA

# A\_\_digital8



## FACTS

RAVENNA/AES67 device

8 AES Inputs, 4 AES Outputs

8 GPI in & 8 GPI Out

Power over Ethernet (PoE)

Cat5 (up to 100m/328ft) or  
Coax (up to 1000m/3280ft)



# RAVENNA

# A\_madi4



## FACTS

Converter between RAVENNA & MADI

Flexible SFPs

2 converter units per box

Various modes possible:

- 64/128 channel conversion 1:1
- 64 channel MADI to RAVENNA Link adapter for mc<sup>2</sup>36



**RAVENNA**



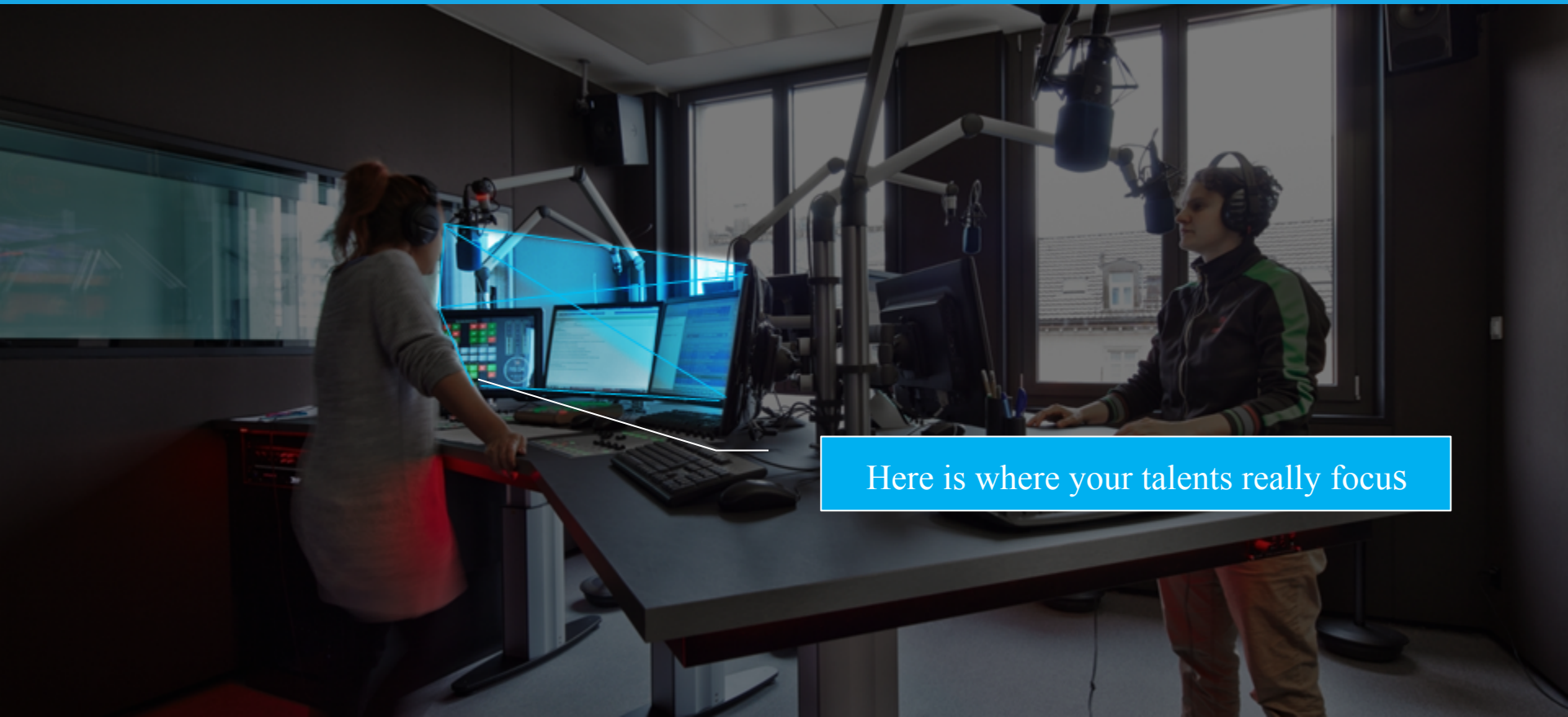
# APPLIED IN THE STUDIO



# Live / OnAir



# Live / OnAir



Here is where your talents really focus

# Simplify operation



## AutoGain

DJ or guest just talks for 5 seconds.

The console sets the analog mic gain automatically to ensure proper levels.

Engage → Talk → Signal OK

# Simplify operation



## AutoMix

Put multiple mics into AutoMix

The desk automatically mixes the mics to always ensure a proper audio levels and clean and punchy sound.



# VIRTUAL RADIO ENVIRONMENT

# Today's Typical Radio Studio.

Sound Cards



PC



Codec

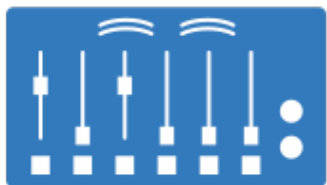


Hybrid



Voice Processor

Analog Gear



Console



Stream Encoder



Air Processor

# Remember life before the smartphone?



# Radio has experienced some of this already.



Vinyl



Mag Tape



Carts



CD



Other



Audio Apps



# Today's Typical Radio Studio.

Sound Cards



PC



Codec

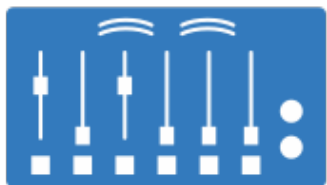


Hybrid



Voice Processor

Analog Gear



Console

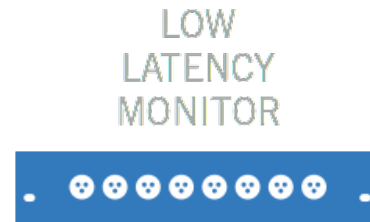


Stream Encoder



Air Processor

# The Virtual Radio Studio.

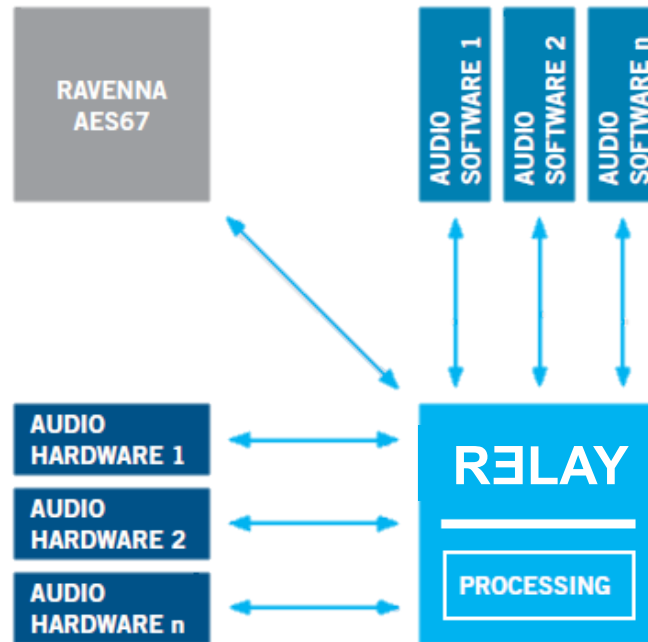


# RELAY

## The RELAY Radio Bag.



# RELAY PLATFORM - How it works

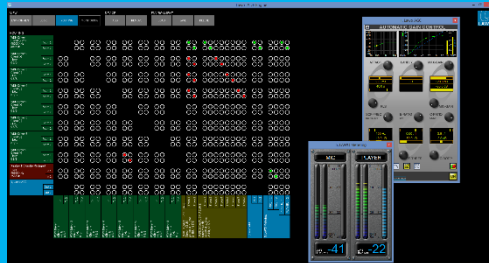
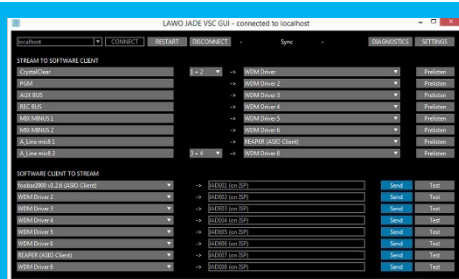


# RELAY

## The RELAY Products



- VRX4 Virtual Radio Mixer Software. 4 faders, 1 mix bus, native processing.
- VRX8 Virtual Radio Mixer Software. 8 faders, 2 mix buses, Automix, native processing.
- OnAir4 RAVENNA/AES67-based audio interface. Mic/lines, headphones, zero latency monitoring
- Virtual PatchBay Routing, soundcard control, RAVENNA/AES67 interface, VST host, processing.
- Virtual Sound Card RAVENNA/AES67 driver for Windows.
- Third party products available from partners





# THANK YOU VERY MUCH FOR YOUR ATTENTION.

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