

# MISSION: Control.

## HARVEY®

Control center for audio, light and media equipment

Flexible number of analog and digital audio channels

Excellent audio quality with minimal, constant latency

Simple configuration of distributed installations with Hypermatrix®



**HARVEY** is a family of flexible audio DSPs with extensive media control capabilities and thus key component for PA and conference systems.

The **HARVEY Pro** product line is equipped with up to 32 analog audio input or output channels, optional Dante interface, and a large number of different control interfaces. The unit has extensive audio processing functions that can be configured in a way that is tailored precisely to the respective application. These settings can also be saved in presets and retrieved at the press of a button so that you can change quickly between different installation options. Due to the varied control interfaces HARVEY Pro can connect to very different devices and act as the central control unit for audio, lighting and media technology.

It converts the data between the interfaces and eliminates the need for additional converters. All established media control systems are suitable for controlling HARVEY Pro and all other devices connected to it. Furthermore HARVEY Pro features the ability to be controlled by modern web browsers. For that purpose the web interface can be generated with a single click and adjusted by the user without any programming know-

ledge. As such, HARVEY Pro is the ideal audio and media control matrix for conference rooms, theatres, museums, home cinemas, educational facilities, and multipurpose rooms.

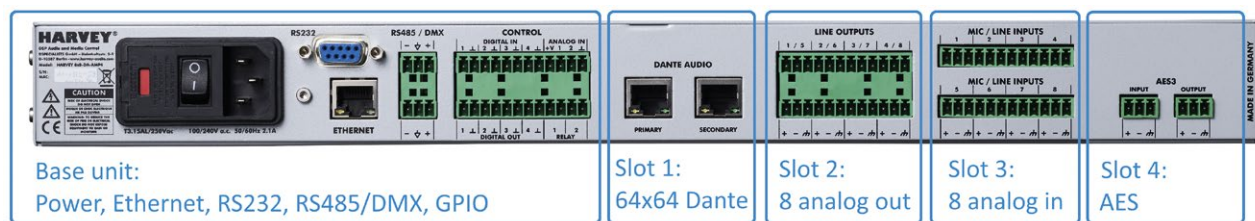
## FAMILY MEMBERS

HARVEY Pro is available in different configurations regarding the number of analog and digital audio IO channels. Up to 32 analog channels can be used via the 4 slots of HARVEY Pro. The Dante interface supports  $64 \times 64$  IO channels.

AES/EBU is also available providing one AES IO channel via Phoenix connectors or 4 AES IO channels via TASCAM interface. A separate clock input supports studio applications.

The class-D amplifier outputs offer a power of in total 80W per HARVEY Pro. In combination with the Dante interface HARVEY Pro can provide up to 12 amplifier outputs with a total power of 80 W. Fields of application are sophisticated sound installations with multichannel sound.

A complete list of HARVEY Pro family members can be found on the back of this leaflet.



Example device: HARVEY Pro 8x8-DA-AES

## INTERFACES

**Audio Inputs:** Each input can be configured by software as line level input or as microphone level input. Inputs are equipped with software controllable 48 V phantom power (P48).

**Audio Outputs:** Analog balanced line level outputs, e.g. for driving amplifiers inputs.

**Dante:** Optionally available; for connecting several HARVEY units and exchanging digital audio streams among the units and other Dante devices via an Ethernet network.

**Class-D amplifiers:** 4/8/12-channel Class-D amplifier unit capable of driving up to 12 passive loudspeakers directly with a total of 80 watts (RMS).

**Ethernet:** Connection to configuration PC as well as other controlling devices or devices to be controlled.

**RS232, RS485/DMX512:** Interfaces for remote control and exchange of control commands of HARVEY units and external devices, e.g. lighting installations, PA systems, media technology or operating panels.

**Digital Control Inputs:** 4 logic inputs for switching and controlling presets and binary parameters, e.g. muting channels with external tactile switches.

**Analog Control Inputs:** 2 analog inputs to externally control HARVEY parameters, e.g. level by potentiometer.

**Digital Control Outputs:** 4 logic outputs for the control of external devices, e.g. relays or LEDs.

**Relay Outputs:** 2 outputs for galvanically isolated control output of external devices.

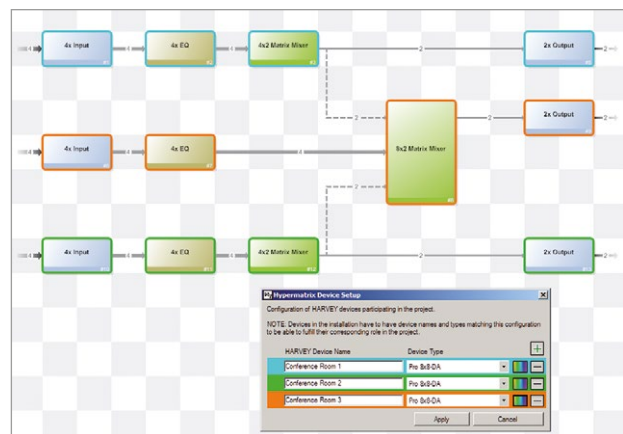
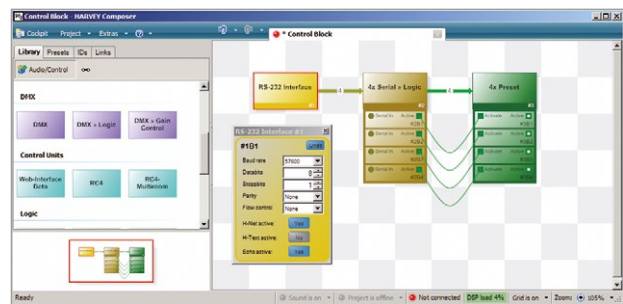
## SOFTWARE

HARVEY Composer, the configuration software of the HARVEY family, has a very user-friendly design and allows you to configure complex projects with only a few mouse clicks. Blocks, that represent the audio signal processing and control functions, are positioned on the worksheet using drag & drop. With only one movement of your mouse multiple channels can be connected, while the number of channels is adjusted automatically. Independent of the number of physical connections, individual connections are combined into clear bundles.

Signal processing functions such as EQ, level display or ducker and many others can be added to the installation simply by drag & drop and configured online. Mixing and switching matrices are also available and can be parameterized freely.

In addition to the audio layer, there is also a control layer. Incoming control signals are evaluated here, linked logically and brought to the audio block control inputs. Presets allow you to switch conveniently between very different use cases. HARVEY fades softly between the presets with configurable fade time per parameter.

With **Hypermatrix®** you can configure as many HARVEY devices as you want on a network as if they were just one single system. The Hypermatrix software always ensures that audio signals and control commands arrive at the right place at the right time.



## AUDIO PROCESSING

<b>Level, Mixer</b>	Mixing matrix
	Mixing matrix with node delay
	Automatic mixer
	Level control
	Level meter
<b>Equalizer</b>	Mute
	Ducker
	8-Band parametric equalizer
	Filter (highpass, lowpass, hi-shelf, lo-shelf)
	Compressor
<b>Dynamics</b>	Limiter
	Expander
	Noise Gate
	Automatic Volume Control (AVC)
	Automatic Gain Control (AGC)
<b>Delay</b>	Acoustic Echo Cancellation (AEC)
	Delay-up to 1000 ms for each delay block

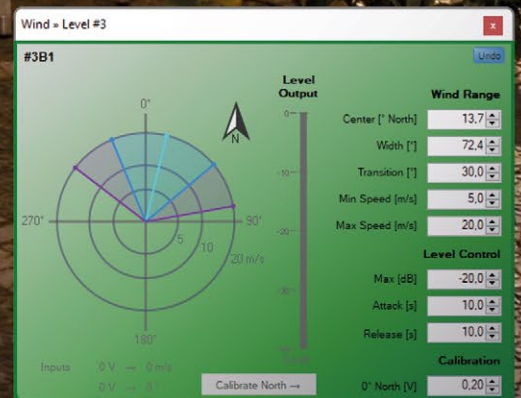
## CONTROL

<b>I/O Interfaces</b>	RS 485 DMX, RS 232
	TCP/IP, UDP/IP
	Contacts, Voltage
<b>Protocols</b>	Proprietary (binary, text based)
	User defined messages
<b>Control Events</b> (triggered by)	Presets
	Thresholds (Level, DMX)
	Input Contacts, Messages
	Block states (e.g. Ducker)
	Flip-flops
<b>Control Events</b> (can trigger)	Presets
	User-defined messages
	Block states (e.g. Level mute)
	Output Contacts
	Flip-flops
<b>Gain control</b>	Input Voltage mapping
	DMX value mapping

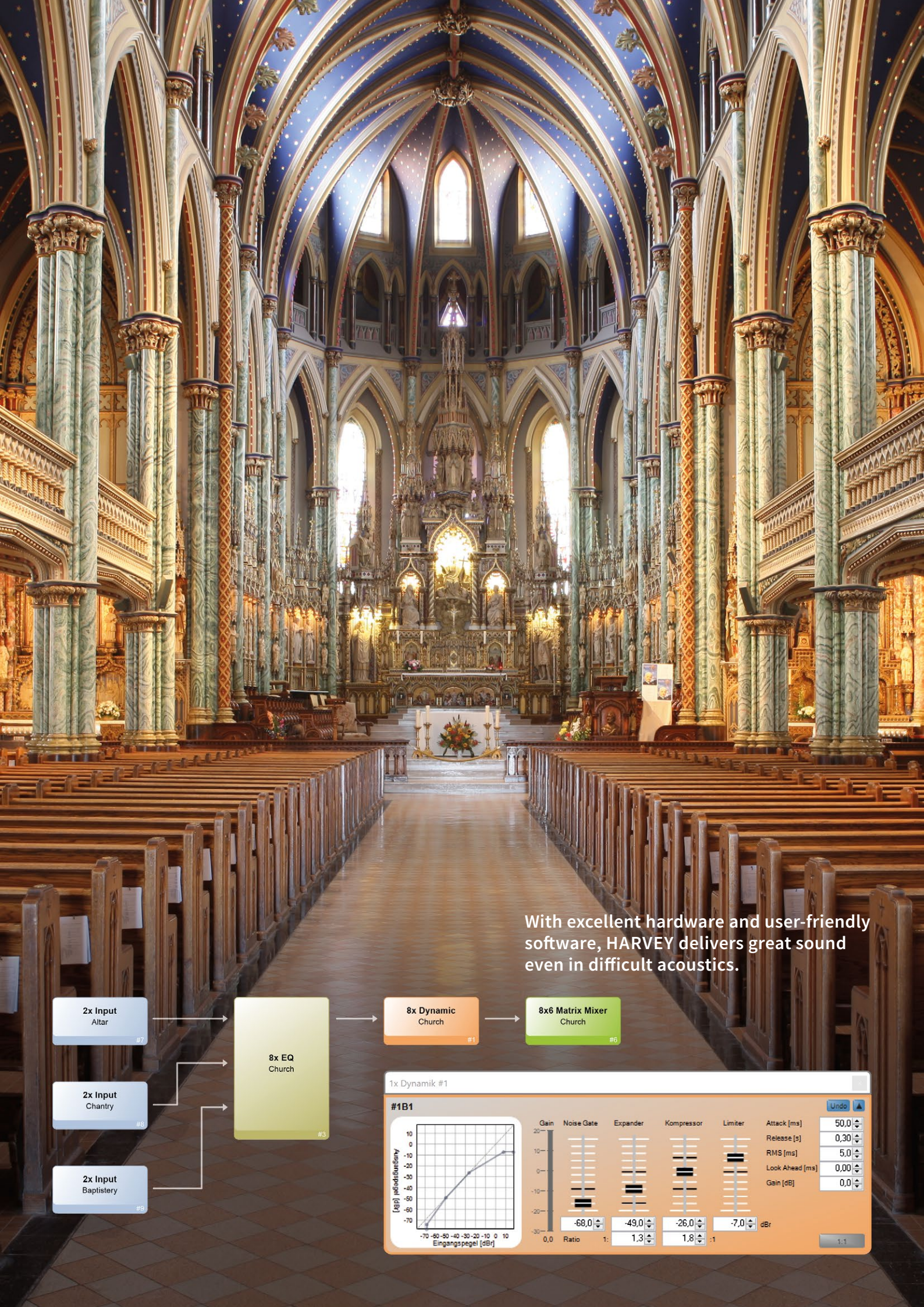




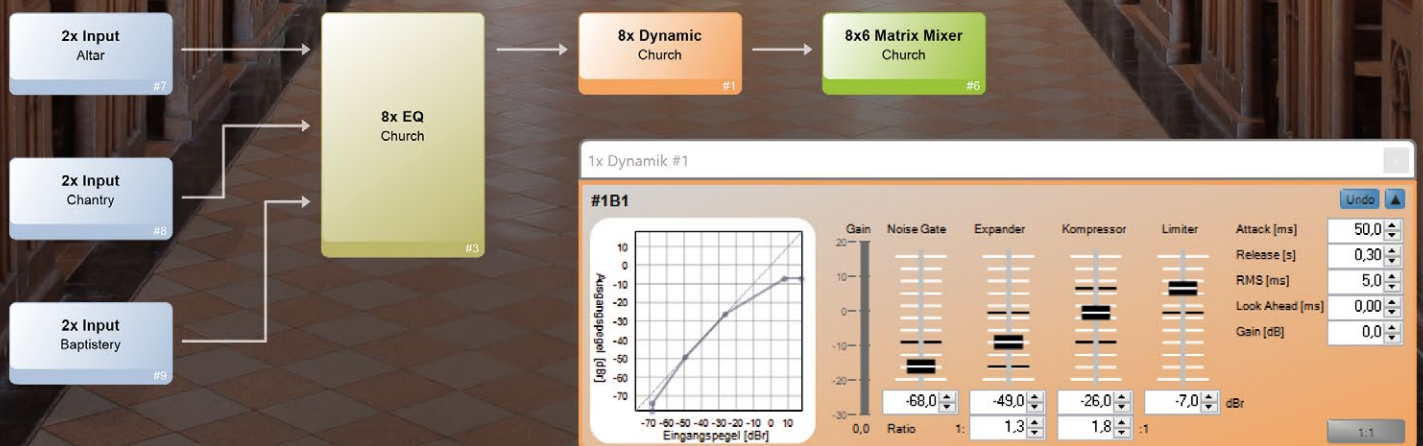
With the wind-to-level control block, HARVEY always sets the perfect volume depending on wind speed and direction so that beach club neighbors are not disturbed.





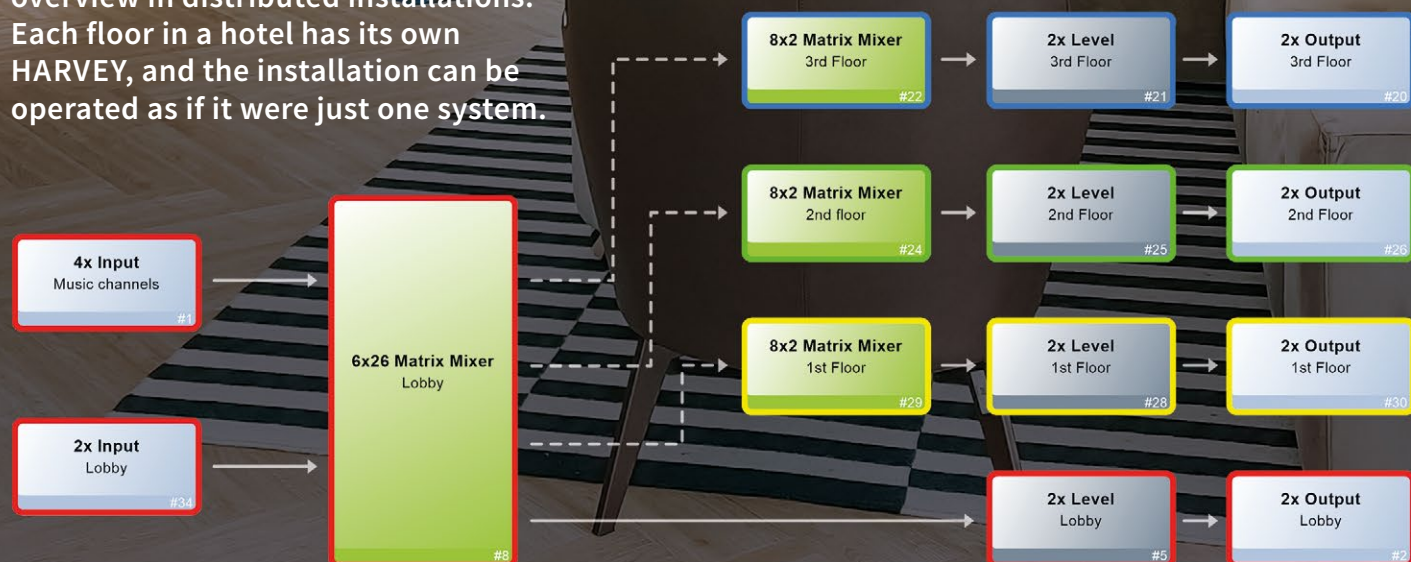


With excellent hardware and user-friendly software, HARVEY delivers great sound even in difficult acoustics.





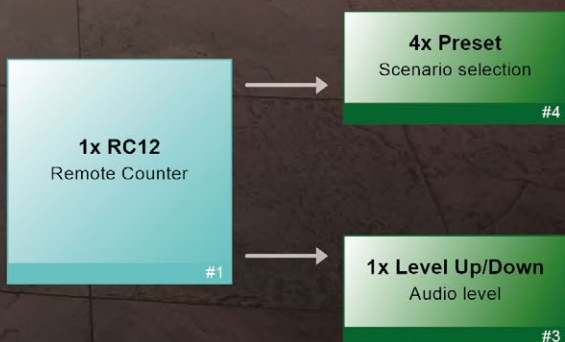
HYPERMATRIX provides the perfect overview in distributed installations. Each floor in a hotel has its own HARVEY, and the installation can be operated as if it were just one system.





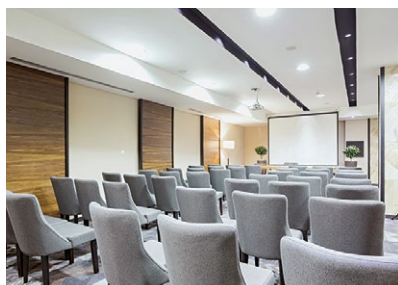


Several times a day the sound and light scenario changes. And HARVEY always has everything under control with the remote controls, the preset logic and its DMX interface.





## WHEN GOOD SOUND AND EASY SETUP MATTER: HARVEY



Conference rooms



Theme parks



Theaters



Town halls



Museums



Hotels

## AVAILABLE SYSTEM VARIANTS

With Dante interface 64x64	
HARVEY Pro 0x0-DA	HARVEY Pro 8x16-DA
HARVEY Pro 0x0-DA-AES	HARVEY Pro 12x8-DA
HARVEY Pro 0x8-DA	HARVEY Pro 12x12-DA
HARVEY Pro 0x16-DA	HARVEY Pro 16x0-DA
HARVEY Pro 0x24-DA	HARVEY Pro 16x8-DA
HARVEY Pro 4x0-DA	HARVEY Pro 24x0-DA
HARVEY Pro 8x0-DA	HARVEY Pro 8x8-DA-AES8
HARVEY Pro 8x8-DA	HARVEY Pro 8x8-DA-AMP4
HARVEY Pro 8x8-DA-AES	HARVEY Pro 0x0-DA-AMP12

Other variants upon request

Without Dante interface
HARVEY Pro 8x8
HARVEY Pro 8x8-AES
HARVEY Pro 8x16
HARVEY Pro 8x24
HARVEY Pro 12x8
HARVEY Pro 16x8
HARVEY Pro 16x16
HARVEY Pro 24x8

Wall panel remote control
HARVEY RC4 EU
HARVEY RC4 US
HARVEY RC12 US



## CONTACT

DSPECIALISTS

Digitale Audio- und Messsysteme GmbH

Helmholtzstraße 2 – 9L

10587 Berlin

Germany

Tel: +49 30 467 805 - 0

Fax: +49 30 467 805 - 99

sales@dspecialists.de

www.dspecialists.de

[www.harvey.audio](http://www.harvey.audio)

HARVEY and Hypermatrix are registered trademarks of DSPECIALISTS GmbH.

Presented by:

