PA/VA
SOLUTIONS

VARIODYN ONE
Next Generation Public Address
and Voice Alarm System

Honeywell

ONE SOLUTION FOR YOUR HOLISTIC NOTIFICATION NEEDS:
VARIODYN ONE

VARIODYN ONE Public Address and Voice Alarm system is a harmony between technology, design and performance.

VARIODYN ONE is an **IP-based Public Address and Voice Alarm (PA/VA)** system that delivers exceptional usability and sound performance to address daily operational and safety needs of a building. It is the next generation of the trusted VARIODYN product line, which is used in some of the largest and most complex installations across the world. It is the foundation of Honeywell's new global notification platform that can better inform building occupants of activity in a building – from daily announcements to emergency response directions.

- **Supports up to 400 nodes** in a network ensuring you can meet requirements of biggest installations
- **Modular Architecture** enabling you choose what you need
- **Inbuilt Relay Matrix** to help in value engineering the solution
- **Power Sharing Amplifiers** to reduce the cost of equipment and batteries for power backup
- **Easy to use Configuration Software** to reduce commissioning time
- **Easy to use Management Software** to easy monitoring and control of the system
- **Inbuilt Dante interface** to integrate with 3rd Party audio
- **VARIODYN ONE system can connect to 3rd party product** over MODBUS Protocol through Serial link as an option to monitor PA/VA over most commonly accepted open protocol
- **TCP/IP based architecture** providing flexibility for future expansions
- **120 simultaneous audio broadcasts** supported in a network ensuring you don't miss any announcement in critical infrastructure projects
- **Advanced Cyber Security features** to ensure that your data and system are secure
- **Modern HW Design** to ease installation and maintenance of the system
- **Integration with Honeywell Fire Alarm systems** ensuring ease of installation, commissioning, monitoring and managing the system
- **EN 54-16 certified** to ensure that you have peace of mind when it comes to performance under emergency situations

VARIODYN ONE can support a wide range of applications:

Airports, Metro Stations, Stadiums, Hotels, Shopping Malls, Education Complexes, Hospitals, Industrial Plants.

WHY VARIODYN ONE?

Enhance User Experience

- Built in advanced DSP ensuring excellent audio performance
- Easy to use Graphical User Interface to manage the complete system
- Modern front facia design to provide detailed system status
- iF DESIGN AWARD winner 2021

Reduce Total Cost of Ownership

- Less equipment due to features like **inbuilt Relay Matrix** and Power Sharing amplifiers
- Less lifetime maintenance costs due to reduction in backup batteries
- Less costs to upgrade due to TCP/IP based modular architecture
- Less costs to integrate with 3rd party audio systems due to support of open protocols like Dante
- **ONE** system for both emergency and general paging requirements as well as background music
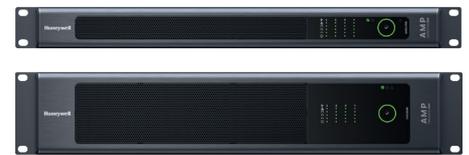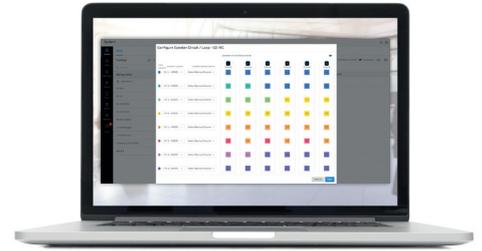
Holistic Life Safety and Notification Experience

- Integration between your building Honeywell fire alarm system and VARIODYN ONE PA/VA system

Reduce Your Installation and Commissioning Costs

- Easy to use new configuration software
- Improved mechanical design ensuring ease of handling and cabling of equipment
- Inbuilt Dante interface for easier integration with 3rd party audio systems supporting Dante
- VARIODYN ONE system can connect to 3rd party product over MODBUS Protocol through Serial link as an option to monitor PA/VA over most commonly accepted open protocol
- Common commissioning software for both Honeywell fire alarm system and VARIODYN ONE PA/VA, reducing training effort and commissioning time for each project*

Win More Projects

- Higher flexibility to optimize solution because of modular architecture
- Reduce number of devices enabled by features like inbuilt relay matrix and power sharing amplifiers

* Feature to be available in future release

MODULAR ARCHITECTURE IN VARIODYN ONE
– CHOOSE AS PER YOUR PROJECT NEED

Every project is different and hence a fixed configuration means that you spend on features that you might not need. VARIODYN ONE provides you highest level of flexibility enabled by below mentioned features:

- **INCs with optional modules:** With 4 different configurations of INCs you can design your system as per what is really required rather than what you are offered by default. Choose between different extension modules with INC. For example, if you have 2 INC controllers in the same rack, you can choose one with an inbuilt DAL module to connect DCS Plus call stations or UIM and the other one with either an Audio In/Out module or a DANTE module or with no module. Also, expand from 8 to 48 speaker circuits using optional *field mountable* speaker circuit modules (8 speaker circuits/module). You can connect 6 speaker circuit modules per INC.

- **Relay Matrix Mode:** The advanced Relay Matrix Mode in VARIODYN ONE allows dynamic allocation of amplifier channels to speaker circuits. Meaning now you can decide which amplifier channel powers which all speaker circuits, rather than we decide it for you.

  For example, you can allocate amplifier channel one to 24 speaker circuits and the other channels to the remaining 24 speaker circuits, which means you can power all 48 speaker circuits using just four amplifier channels.
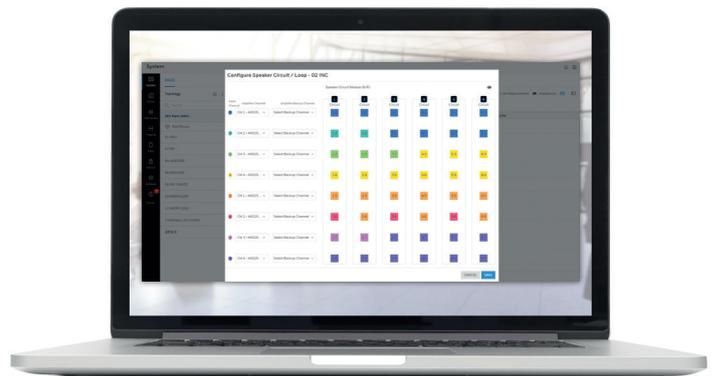
- **Power Sharing Amplifiers:** Flexibility to dynamically allocate power per channel as per your project requirement. For example, you can program per channel from as low as 50W and go up to 500W. Reduce unallocated amplifier power and make last minute changes at commissioning by having flexibility to choose what you need per channel.
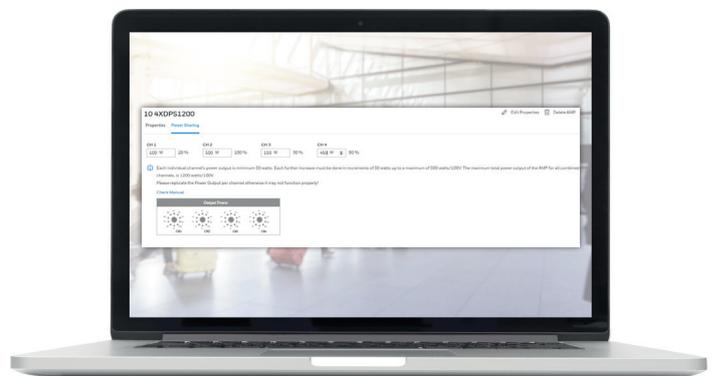
VARIODYN ONE MANAGEMENT SOFTWARE – INTUITIVE INTERFACE WITH HIGH RELIABILITY

The new Management Software in VARIODYN ONE provides ease of monitoring and operating the PA/VA system from a centralized location or through multiple monitoring stations spread across the project. Graphical interface has been designed ensuring that you easily understand the system status and self-learn how to operate and use the software.
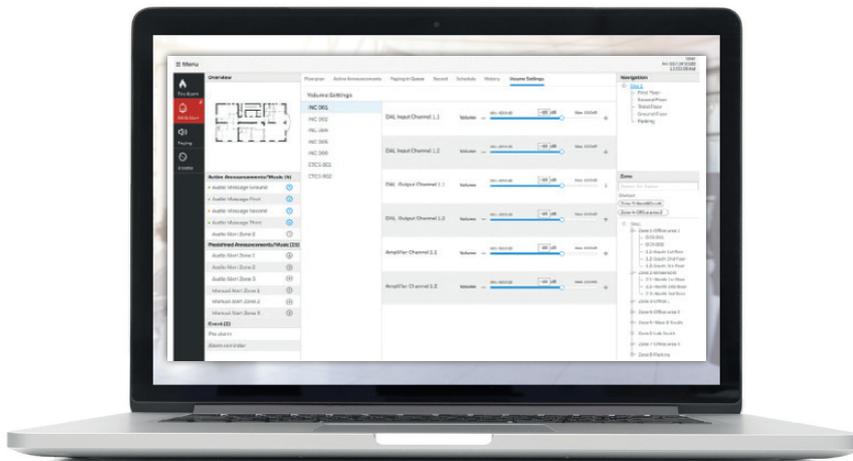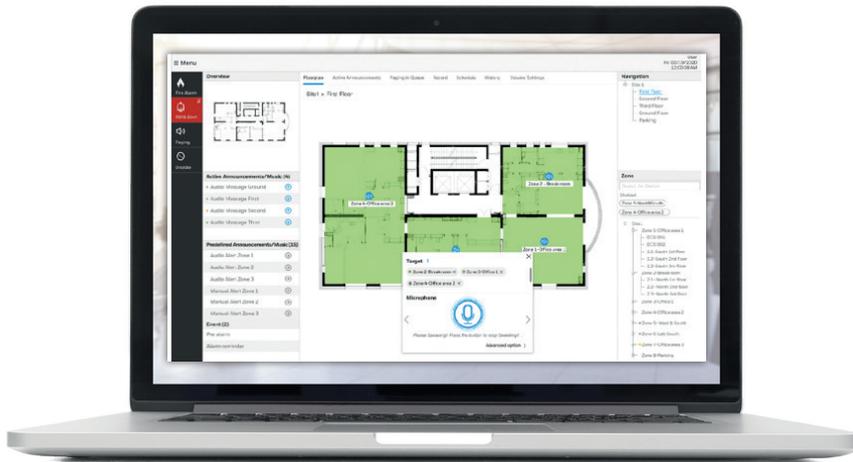
KEY FEATURES

- Import maps of the building/s
- Define paging zones
- Define pre-configured paging announcements
- View real time paging status
- Initiate and stop pre-configured paging announcements
- Record and pre listen paging announcements before broadcast
- Supports live paging through mic
- Supports paging on the fly
- Define priority levels for paging
- Increase/ decrease volume
- Define User Access levels
- Generate event log
- Supports secure communication between controller and management software
- Integrated Management Software for Honeywell

# VARIODYN ONE CONFIGURATION SOFTWARE – PROGRAMMING MADE EASY

The VARIODYN ONE Configuration Software is a result of immense feedback we have received from installers of the PA/VA systems and experience of our User Experience and Development teams to make it *Simple*, *Interactive*, *Intelligent* and *Easy to upgrade* for future enhancements.

KEY FEATURES

• Drag and drop devices during Rack configuration

• Automatic calculation of device weight, batteries required, and heat dissipation of devices installed in the rack

• Define and configure zones

• Define C&E Rules

• Define Paging configurations

• Generate event log

• Display configuration errors

• Import audio files and create playlists

• Use same software to configure both Honeywell Fire alarm system and VARIODYN ONE PA/VA system*
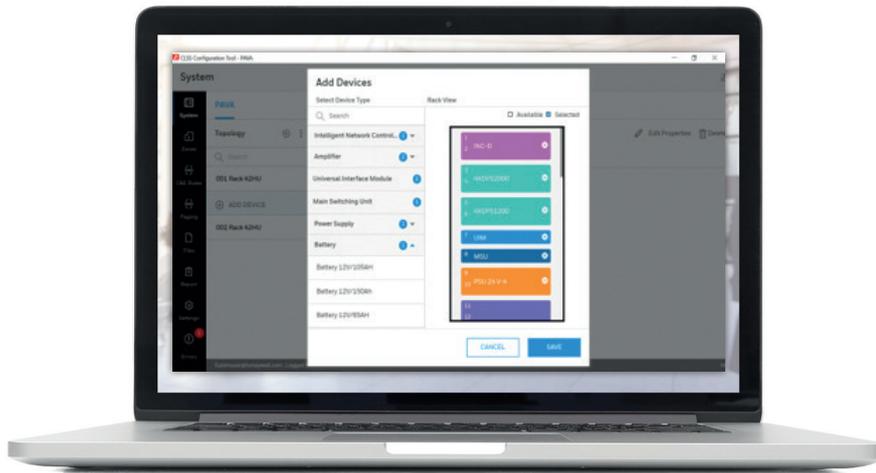
* Feature to be available in future release
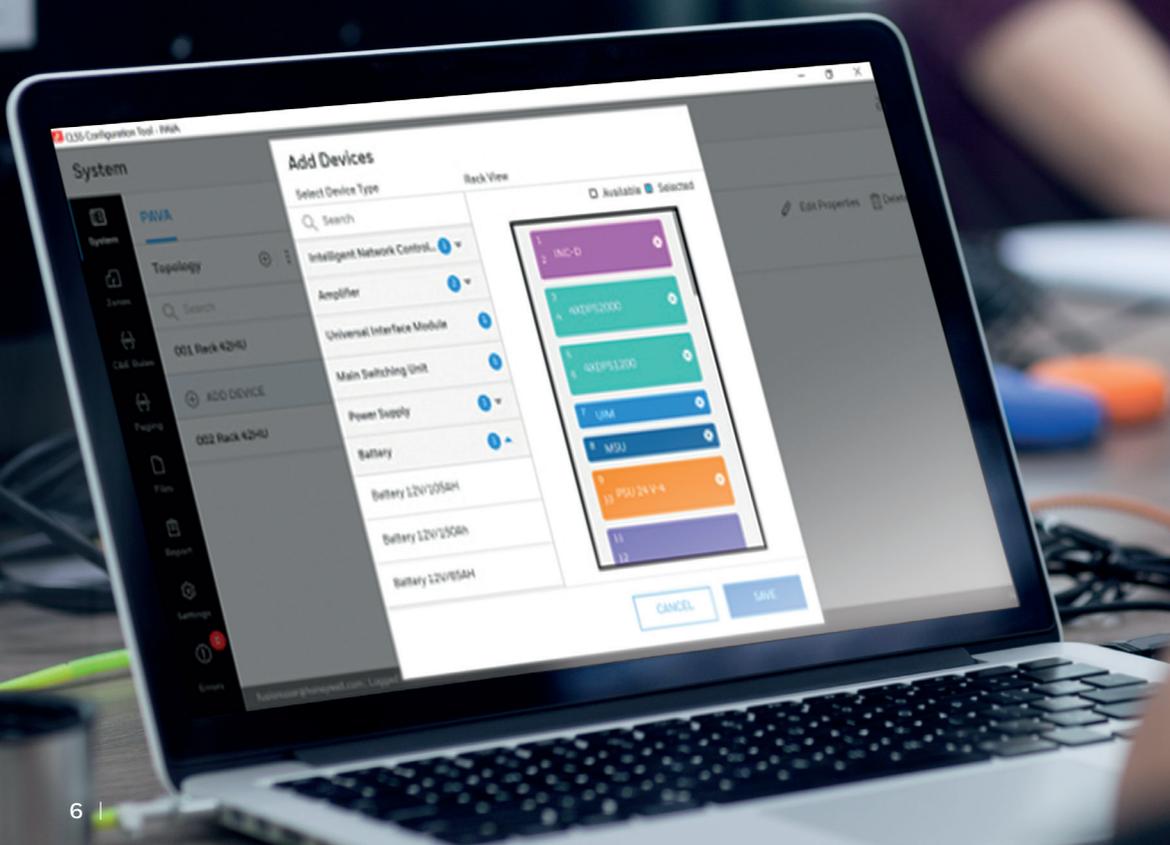
VARIODYN ONE SYSTEM COMPONENTS

INC (INTELLIGENT NETWORK CONTROLLER)

INC (Intelligent Network Controller) is the main controller of the VARIODYN ONE PA/VA system. It is responsible for managing and monitoring all key components of the system including power amplifiers, speaker lines, call stations, etc.

Four options that you can choose from as per *your* requirement are:

- **INC:** Intelligent Network Controller without any extension modules
- **INC-D:** Intelligent Network Controller with DAL Module (8 DAL ports) and 12 GPIOs
- **INC- DANTE:** Intelligent Network Controller with DANTE Module (8X8) and 12 GPIOs
- **INC-A:** Intelligent Network Controller with Audio In/Out Module (6 IN/OUT) and 12 GPIOs

POWER AMPLIFIERS

With the wide range of Power Amplifiers offered by VARIODYN ONE you can be sure to find the one that best meets your project requirements. You can choose between our new fixed power output amplifiers with inbuilt battery charger or our new amplifiers with Power Sharing technology that provides you the flexibility to define power output dynamically per channel.

Four different Class D Power Amplifies to choose from as per *your* requirement are:

- **4XD125B:** 4 Channel 125W per Channel with inbuilt Battery Charger according to EN 54-4
- **4XD250B:** 4 Channel 250W per Channel with inbuilt Battery Charger according to EN 54-4
- **4XDPS1200:** 4 Channel 1200W with Power Sharing Technology
- **4XDPS2000:** 4 Channel 2000W with Power Sharing Technology

ETCS (ETHERNET TOUCHSCREEN CALL STATION)

ETCS (Ethernet Touchscreen Call Station) is an EN 54-16 certified touch screen call station with a big clear screen and unique features. Direct connectivity to the ethernet network provides flexibility to change the location or install a new call station at any stage of the project. This small power full device is packed with features to ensure ease of operation and maintenance of your VARIODYN ONE system.

VARIODYN ONE SYSTEM COMPONENTS

DCS PLUS CALL STATION

DCS Plus call station with its simplistic and elegant design ensures that you are able to perform your key day to day functions like paging, volume control, intercom etc without any hassle. It has 12 freely programmable keys to ensure that you define the functions that are best suitable for your project.

With the capability to add 6 additional DKM-18 modules with 18 keys each, you can expand the total number of keys to 120 to ensure that you can serve a small building to a large complex with a single DCS Plus call station.

UIM (UNIVERSAL INTERFACE MODULE)

The UIM (Universal Interface Module) serves as the interface module of the VARIODYN ONE PA/VA system for connecting two analog audio inputs, two analog audio outputs, as well as 48 control contacts. For eight control contacts, short-circuit and interruption monitoring can be activated.
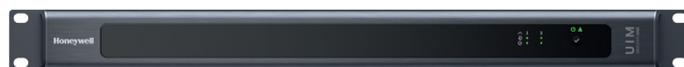
PSU (POWER SUPPLY UNIT)

PSU (Power Supply Unit) is an integral part of a Public Address and Voice Alarm system. VARIODYN ONE offers two different power supplies to choose from depending on what meets your project requirement. All our Power supplies are certified according to EN 54-4/A2.

Two Power Supplies to choose from as per *your* requirement are:

- **PSU-24V/190A:** Power Supply 1U – 24VDC, 190A
- **PSU-24V/380A:** Power Supply 2U – 24VDC, 380A

MSU (MAINS SWITCHING UNIT)

The MSU (Mains Switching Unit) is used to secure the power supply of all VARIODYN ONE components that are installed in a rack. In addition, it offers a connector for connecting a service PC for local/network-wide maintenance purposes. All connected PA/VA system components can be switched ON or OFF by using the switches. On detecting a short circuit or an overload, protective function is automatically triggered, and the connected PA/VA system components are disconnected from the power supply.

LOUDSPEAKERS

Honeywell offers loudspeakers, specially designed to meet various requirements and specifications in many project types e.g.

Excellent acoustic performance to realize clear, understandable voice announcements or high quality background music.

- **Cost-effective types**
- **Well designed, modern appearance**
- **Easy for installation to reduce time, efforts and costs**
- **Robust material to offer long lifetime**
- **Models with ceramic terminal block and thermofuse**

EXTRACT FROM OUR EXTENSIVE PRODUCT OFFERINGS:

Ceiling Loudspeaker
- Metal or plastic ceiling loudspeakers
- Several power tappings with simple setting
- Partly dual-cone speaker to ensure best audio performance
- Appropriate for indoor applications such as offices, warehouses, schools etc

Column Loudspeaker
- Flat, directed sound propagation, minimized reverberation
- Intelligible voice and superior sound reproduction
- IP65 rating
- Great choice for theme parks , exhibition halls and any open, high-volume rooms with high reverberation time.

Horn Speaker
- Clear voice message reproduction for open and outside areas
- Offers a high sound pressure and long-lasting weather resistance

Sound Projector
- Wide frequency response range, low distortion
- Robust aluminum housing
- IP65 rating
- Best option for applications such as corridors and railway platforms

Cabinet Loudspeaker
- Simple power setting and easy installation
- Practicable for wall mount application
- Plastic, MDF or metal vandal-proof cabinet

Spherical Loudspeaker
- Where wall mount or ceiling mounting is not possible
- Variable hanging height
- 360° sound propagation

Special Loudspeaker for tunnels
- Specially designed and EN 54-24 certified for tunnel applications
- Boundary effect and loudspeaker phasing for best intelligibility in extremely difficult tunnel projects

ProSound Loudspeaker
- High quality, powerful speakers for small and large areas
- Accessories for varous mounting types

THE
FUTURE
IS
WHAT
WE
MAKE IT

—

Honeywell