

Voice Alarm

Digital Output Module (DOM)

The Digital Output Module (DOM) is the central control element of the Honeywell Voice Alarm System. It has interfaces to all input/output modules, manages and monitors the loudspeaker circuits.

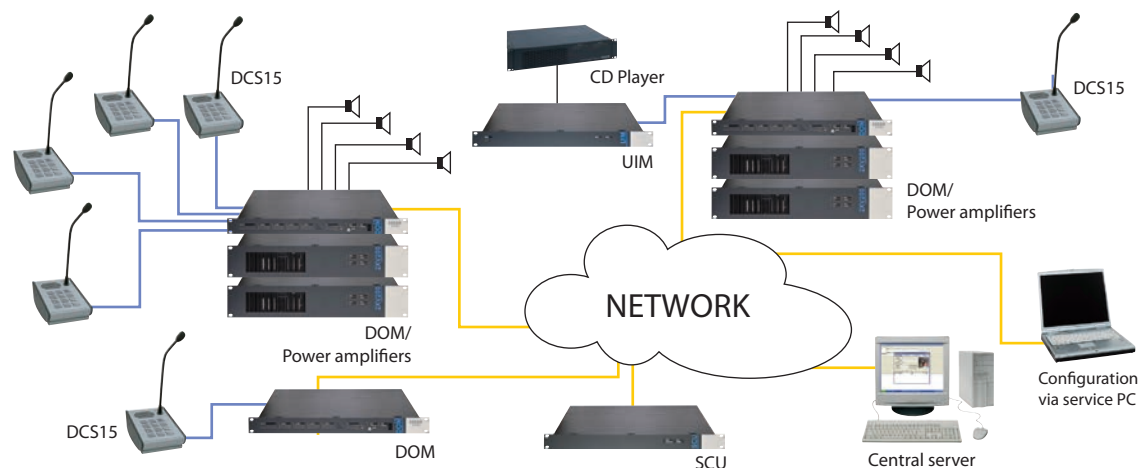
Digital Output Module (DOM)

The Digital Output Module (DOM) is the heart of the Honeywell Voice Alarm and Public Address system. Managing either 8 or 24 zones the DOM routes up to 4 channels of audio via amplifiers to any individual zone or groups of zones.

The 2 variants, DOM4-8 and DOM4-24 are both equipped with four independent audio outputs in order to access four channels. Each audio channel controls up to 8 loudspeaker

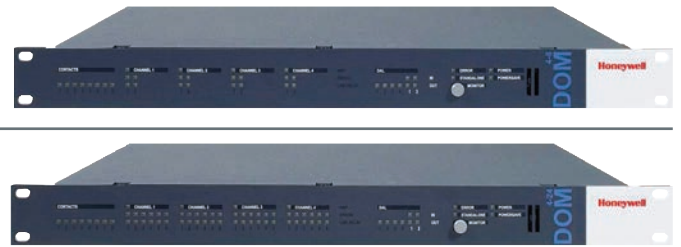
Key Features:

- Certified to EN54-16
- Message store for pre-recorded emergency messages
- Network ready for larger systems and / or distributed rack system
- Continuous monitoring of all vital system components
- Automatic and dynamic switching to backup amplifier
- Automatic volume control (AVC) on all channels
- Remote monitoring and configuration via ethernet across internet or VPN
- Emergency standby power supply via 24 V DC
- Monitoring of complete audio path including loudspeaker circuits
- 4 connections for paging and emergency microphones via proprietary Digital Audio Line (DAL)



DOM	Digital Output Module	DCS15	MIC
UIM	Universal Interface Module	SCU	System Communication Unit

DAL (Digital Audio Link)	Serial Connection
Ethernet	
Direct Connection	



Networking

Larger Honeywell Voice Alarm and Public Address systems are established by connecting DOMs within a rack via a dedicated Ethernet network. For very large systems a fault redundant network of copper or fibre may be built to form a distributed system capable of managing hundreds of simultaneous messages.

Modern, user-friendly configuration tools allow flexible system planning with minimal training and costs.

Connections - Per DOM

- Four digital audio links (DAL) for connection of microphones and interface modules.
- Four automatic volume control (AVC) inputs
- Four backup power amplifier inputs
- Loudspeaker zones:
 - DOM4-8: 4 channels, 2 circuit relays each (8 loudspeaker zones)
 - DOM4-24: 4 channels, 6 circuit relays each (24 loudspeaker zones)
- Eight output control contacts
- TWI databus for connection to other systems
- 230 V AC mains supply input
- 24 V DC emergency power supply input

Input/Output

- Push-button for sequential monitoring of local audio channels
- Built in loudspeaker to monitor broadcast to zone circuits

Ethernet

The DOM has a 4-Port Fast-Ethernet-Switch for communication with other system components (DOM, SCU). The maximum range according to the norm with a CAT 5 cable is 90 m (plus 2 x 10 m patch cable). Increased operating distance/range and networking over fibre optics is possible with standard ethernet media converters.

Automatic Volume Control Inputs (AVC)

The integrated automatic volume control function can continually regulate the volume of one or more of the amplifier channels of the DOM according to the sound level of the surrounding environment.

Four sensor microphone inputs with a nominal level of -51 dB are available for this purpose. Up to two sensor microphones can be connected to each channel.

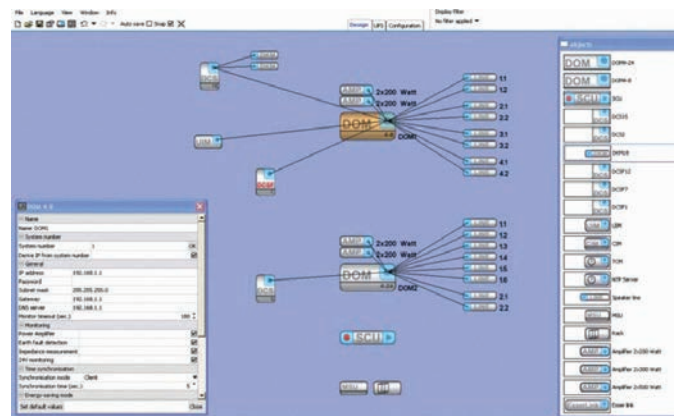
Power-Save Mode

The Power-Save Mode enables the automatic termination of announcements during a power failure. For example, background music or advertising announcements will no longer be carried out.

Software tool

The Honeywell VA Designer is a comprehensive software tool that facilitates the planning and configuration of complex voice alarm and public address systems. With the help of the Honeywell designer, systems can be individually created and subsequently configured.

- System planning (hardware)
- Individual configuration (software)
- Generate configuration data



Design and configuration tool

Technical Specifications

SPECIFICATION	
DIMENSIONS	
Height	44 mm
Width	483 mm
Depth	345 mm / 1 HE, 19"
Weight	
DOM 4-8	5.7 kg
DOM4-24	6.8 kg
Housing color	Grey, similar to RAL 7016
AUDIO OUTPUT	
Output type	Electronically balanced
Nominal level	0 dB
Max. output level	+6 dB
Transmission range	20 Hz to 20 kHz
Max. deviation from the linear transmission	±1 dB in transmission range
Harmonic distortion at the nominal level	< 0.03 % at 1 kHz
Max. harmonic distortion	0.1 % in transmission range
Unweighted signal-to-noise ratio at the nominal level	> 75 dB (A) > 70 dB
Load impedance	Min 5 kΩ, max. 500 pF
SENSOR INPUT (AVC*)	
Input type	Symmetric ungrounded
Nominal level	-51 dB
Nominal level for emergency microphone / telephone station	0 dB
Transmission range	100 Hz to 8 kHz
Max. deviation from the linear transmission	±6 dB in transmission range
Harmonic distortion at the nominal level	< 0.2 % at 1 kHz
Max. harmonic distortion	1 % in transmission range
Unweighted signal-to-noise ratio at the nominal level	> 65 dB (A) > 60 dB
Load impedance	Typ 200 Ω
CONTROL CONTACTS	
Max. voltage	100 V DC / 1 A
Surge voltage resistant	> 2.5 kV
CONNECTION CONTACTS	
Max. voltage	250 V AC, 30 V DC / 5 A
Surge voltage resistance	> 1.5 kV
MAINS VOLTAGE	
Voltage range	90 V AC to 264 V AC
Frequency range	47 Hz to 440 Hz
Power consumption	
DOM4-8 with/without 4 x DAL	40 W/70 W @ 230 V AC 50/60 Hz
DOM4-24 with/without 4 x DAL	50 W/80 W @ 230 V AC 50/60 Hz
EMERGENCY POWER SUPPLY	
Nominal voltage	24 V DC
Power consumption	24 W
ENVIRONMENTAL SPECIFICATIONS	
Ambient temperature	-5 °C to +55 °C
Humidity	15% to 90% relative humidity (non-condensing)

* Automatic Volume Control

Additional Information

Any complex system configuration can be implemented through the networking of multiple DOMs via built-in Ethernet. The DOM4- 8 and DOM4-24 modules are equipped with four independent audio outputs in order to access four channels. Each audio output controls connected loudspeaker zones: the DOM4-8 operates two zones (total of 8 circuits) while the DOM4-24 operates six zones (a total of 24 zones).

Each DOM has storage for up to 1 hour of audio recordings, for voice alarm texts and attention tones.

The volume of each audio source and each channel amplifier can be individually controlled and the quality of audio managed with additional filters such as parametric equalizers, high and low pass filters and delays.

All critical areas of the system are monitored and faults are identified, and announced within seconds.

DESCRIPTION	ORDER CODES
Digital Output Module DOM4-8	583361.21
Digital Output Module DOM4-24	583362.21

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