



i A sound masking system's quality and durability depend on its ability to adapt to changes as much as on its material construction. Networked control makes future adjustments quick and easy because changes can be made without physically accessing the components or altering the cabling. Such a high degree of flexibility maximizes the system's effectiveness and occupant comfort, helping safeguard your most valuable investment: employees.



Security

The LogiSon Acoustic Network is secured using both physical and electronic methods.

The Network Control Panel is small and can easily be located within a secure space. Cabling connections are made inside the enclosure. A key is required to open the door and access the keypad. A password is needed to change the settings. There are no physical controls on the hubs or loudspeakers.

The network upstream from the panel is open. However, 128-bit AES encryption ensures that commands are unreadable whether transmitted to the panel by wired or wireless connection, providing further protection from unauthorized access. Downstream, the network is standard RS-485, which is commonly used in building automation.

The panel also monitors system performance. If a Relay Output Module is installed, it can be connected to warning lights, sirens or a third party security system to immediately alert the administrator to any issues. The administrator can also elect to receive email notification via the Acoustic Network Supervisor Software.

For more information about the LogiSon Acoustic Network's security features, see the *Acoustic Network Supervisor Software* and *Relay Output Module* sections of this catalogue or speak to your LogiSon Representative.

The Network Control Panel can be wall-mounted within a room or closet. It provides the functionality of numerous rack-mounted components, reducing the costs, energy and space needed for equipment.

The panel allows the administrator to establish timer, paging and keypad zones. There are no restrictions on the size of each type of zone and they can be non-contiguous. The administrator can also set the volume and equalizer levels for masking and paging, program ramp-up and timer schedules, select paging channels, and create user limits for each Programmable Keypad. The panel uses non-volatile memory so that these settings are preserved in the event of a power failure.

Commands can be sent to one, a group or all Primary Hubs on the system. Panels can be networked together so that the administrator can manage several floors, an entire building or campus from one location. They can also be linked to third party control systems. Changes can be made in minutes following renovations, moving furniture or personnel, keeping the system performing at optimal levels throughout its lifecycle.

Paging and music are provided simply by adding one or more Audio Input Modules to the panel and connecting a source such as a telephone system or MP3 player. The panel also features a priority page input that allows temporary settings to be implemented in emergencies.

The panel's calendar-based timer utility allows the administrator to schedule changes in the sound masking volume to match expected occupancy levels. Each panel offers nine timer zones. The administrator can establish a different schedule for each zone and each day of the week, with up to nine volume changes per day. These changes are made at a gradual, user-defined rate so as not to call occupants' attention to them. The administrator can also program unique schedules for up to 30 individual dates, such as holidays. The panel adjusts for daylight saving time.

There is also an introductory ramp-up feature for retrofit installations, which progressively increases the sound masking volume over a period of up to 15 days, allowing occupants to acclimatize to their new acoustical conditions. The administrator can program the ramp-up period to begin on a defined date. A unique version can be established for each timer zone.

For more information, see the *LogiSon® NCP-2 User Manual*.

NETWORK CONTROL PANEL

NCP-2

SPECIFICATIONS

Control Performance	Network initialization, masking, paging, timer, keypad settings, zoning, paging/music inputs, system monitoring and diagnostics
Masking Performance	
Volume	35 to 85 dBA in 0.5 dBA steps + mute
Equalization (w/ PC)	1/3-octave, 23 bands, 63 to 10,000 Hz
Preset Contours	50 preset options; customization of each band
Paging Performance	
Audio Inputs	3, any combination of auxiliary, telephone and microphone
Zone Configuration	Zone 1, 2, 3 or none; unlimited zones with Page Director Software
Volume	35 to 85 dBA @ 1 m in 0.5 dBA steps + mute
Equalization (w/ PC)	1/1-octave, 8 bands
Preset Contours	50 preset options; customization of each band
Timer Performance	
Zone Number	Up to 9
Zone Size	Unrestricted
Scheduling	Unique schedule for each day
Volume Changes per Day	Up to 9
Volume Increments	0.5 dBA steps
Rate of Change	0 to 9 minutes per volume increment
Exception Schedules	Up to 30 dates, 3 user-defined schedules
Delayed Start Feature	Yes
Ramp Up Feature	Up to 15 days, user-defined schedule in 0.5 or 1 dBA steps
Daylight Savings Adjustment	Yes
Components per Panel	
Max. Number of Components	125 per panel
Max. Number of Loudspeakers	375 per panel
Network Type	
Upstream from Panel	Open; protected with 128-bit AES encryption
Downstream from Panel	Closed; standard RS-485
Connections	
Power Input	3-pin, screw terminal
Network Output	6-pin
Ethernet Connection	10 Base-T RJ-45
Audio Inputs	3-pin, screw terminal x 3
Priority Page	2-pin, screw terminal
Power	
Input	30 Vdc
Output	30 Vdc
Consumption	Maximum 12 W
Ground	Earth ground
Relay Outputs	2-pin, screw terminal x 2
Battery	
Size	1/2 AA
Voltage	3.6 V
Life Expectancy	10 years
Physical Specifications	
Dimensions (W x H x D)	28 x 23 x 7.6 cm; 11 x 9 x 3 inches
Enclosure	Steel with powdercoat finish
Color	Charcoal grey
Weight	2 kg; 5 lbs
Keypad	20-key membrane panel
Display	4 x 20 backlit LCD
Mounting	4 keyhole mounting positions
Security	
Physical	Key-lock enclosure
Electronic	Password required to access settings, 3 levels
Warranty	5 years; see LogiSon® Product Warranty for details
Certifications	Meets UL, FCC and CE standards; RoHS compliant