X-DCS2000/EN
Digital Integrated System Manager

- **Highly integrated**
- **Easy-access preset buttons**
- **Built-in fault diagnosis**
- **Automatic volume control**
- **Extendable zones connections via software configuration**

X-DCS2000/EN Digital Integrated System Manager (abbr. DCS) is the basic unit of X-618 Public Address and Voice Alarm System. DCS integrates plentiful functions such as zone expansion, multiple audio sources support, audio file storage, net audio, broadcasting, zone control, monitoring, fault diagnosis etc. The supplied X-SMART management software allows users to easily and efficiently manage and control the system.

Features

INPUT/OUTPUT

DCS has 8 dry-contact outputs that can be used to activate external devices. It has 8 pairs of audio output where each one allows multiple 100V loudspeakers to be connected in parallel. A record output port is dedicated for external recording device.

DCS also has 8 dry-contact inputs that can be linked with a fire alarm control center which supports broadcasting alarm tones and evacuation announcement when fire happens. On the rear panel, there are 4 network audio input and 4 auxiliary inputs, which provide connections to external audio sources such as CD/DVD, cassette, FM tuner etc. In addition, there are 4 audio inputs that are capable to adjust volume automatically according to ambient noise (when HN-D32N Noise Detector is installed). Users can set the phantom power and input gain of each volume control input on the rear panel.

CONNECTIONS EXPANSION

DCS can connect with devices and the network to extend zone connections via 4 interchangeable 10M/100M adaptable Ethernet interfaces.

SAFETY AND ROBUSTNESS

DCS can detect errors on main power supply, backup power supply, amplifier circuit, amplifier protection, software, communications, and loudspeakers circuits in runtime. By locating the error's occurrence, DCS provides valuable information for repairing or replacing the malfunctioned devices.

DCS supports power supply and amplifier redundancy. Built-in fuse provides over-current protection to the main power supply. When a short-circuit error is detected in DCS, the power supplied from main power will be cut off and switched to the backup one. Same technology is also used in amplifier switchover. User can configure the amplifier backup solution as 3 backup for 1 main, 2 backup for 1 main, 1 backup for 1 main or 2 backup for 2 main.

AUDIO STORAGE

DCS is built with a 1GB flash memory. Via X-618 Config software, users can upload audio files for later playback or audio synthesis. Volume controllers can be connected with the DCS contact outputs to adjust the zones volume or force switching.

BROADCASTING

DCS supports a variable range of audio sources, such as audio files from external devices (CD/DVD, cassette, FM tuner and etc.), remote paging announcement or broadcasting from X‑NPMI, announcements from the PTT emergency microphone etc.

DCS can broadcast 4 audio message or internet audio simultaneously. Timer broadcast setting can be configured via software to allow system to play specific programs at a specific time even when it is not supervised. With the software, user can also handle up to 255 priorities to meet complex public address requirements.

ZONE CONTROL

User can select audio sources and zones to broadcast by clicking directly on the control buttons on the front panel.

DCS supports audio matrix, allowing any audio sources to be played in any zones.

MONITORING

DCS has a built-in loudspeaker and it can enable zone and audio source monitoring. When the system has been extended via Ethernet, network remote supervision can be performed.

SHORTCUT CONTROL

A highlight of DCS is the one-click emergency mode switchover feature. A red emergency mode button can be found on the front panel, which can activate the fire alarm broadcast mode in an emergency by a single click. In emergency mode, the recorded evacuation announcement will be broadcasted and the zone alarm indicator lights will be turned on. This function significantly improves the evacuation efficiency.

Users can preset the functions for the other buttons or their combo usage. The label describing buttons' functions can be replaced easily.

COMPONENTS

- Buttons for special operations: select all, reset, error confirm and etc.
- Zone selection buttons
- Audio source selection buttons
- Emergency mode button

INDICATORS

- Device status indicator lights can show whether the device is powered, malfunctioned, disabled, running or delayed
- Zone status indicator lights
- Audio source status indicator lights

INTERFACES

- 8 dry-contact outputs
- 8 loudspeaker line outputs
- 8 dry-contact inputs
- 4 auxiliary audio inputs with AVC
- 4 noise detector inputs
- 4 amplifier interfaces
- RS - 485 port for fire alarm
- Main power port
- Backup power port (DC 24V)
- 4 10/100M adaptable Ethernet interfaces

Certification and Standard

Category	Region	Certification
Safety	Europe	CE Complied
Voice Alarm	Europe	EN 54 (Part 16) Complied

Technical Specifications

Parameter	Value
Power Supply	
Main power supply	~100 - 240 V,50/60 Hz
Backup power supply	DC 21.5 V - 28.5 V
DC power output	DC24V/1A
Max. input power	120 W
Rated power	50 W
Audio Input	
Auxiliary input	1V(0dBV)
Input impedance	20 kΩ
Frequency response	60 Hz - 16 kHz
SNR	> 85 dB
Audio Output	
Audio output channels	4
Output signal	1.2V(1.6dBV)
Record output	1V(0dBV)
AVC Input	
Channels	4
Input signal	14mV(-37dBV) or 330mV (-9.6dBV) configured by switch
Input impedance	20 kΩ
Phantom power	DC 24V, configured by switch
Frequency response	60 Hz - 16 kHz
SNR	> 65 dB
Loudspeaker Circuit	
Output channels	8, with circuit fault detection function
Max. output load	500 W (If the line supervision is used, the load shall be less than 250W.)
Trigger Input / Output	
Trigger input ports	8
Trigger output ports	8 (NO, NC and COM)

Parameter	Value
Max. working voltage	AC 250 V / DC 30 V
Max. working current	2.5 A
Others	
Monitoring loudspeaker	10W / 8Ω
Ethernet speed	10 M / 100 M
Ethernet interface number	4
Storage space	1 GB
Work Condition	
Humidity	< 95 %, non condensing
Operating temperature	-10 °C ~ +55 °C
Storage temperature	-40 °C ~ +70 °C
Specification	
Dimension (W×H×D)	482 × 88× 420 mm
Mount dimension (W×H×D)	580 × 235 × 552 mm
Net weight	9.3 kg
Gross weight	12.5 kg

Parts Included

Component	Quantity
X-DCS2000/EN	1
Panel paper	6
Dry-contact input connector (8P)	2
Dry-contact output connector (6P)	4
Loudspeaker connector (16P)	2
Amplifier connector (4P)	2
AVC connector (8P)	2
DC power wiring terminal (4P)	1
Twist-pair cable (2 m)	1
Audio cable	1
AC power cable	1
Fuse (2A)	1
Product Instructions	1
CD-ROM	1

Ordering Information

Description	Ordering Information
X-DCS2000/EN Digital Integrated System Manager	**X-DCS2000/EN**
Push-to-Talk Microphone (accessory)	**HN-PTT**

Honeywell