

X-DCS2000 Digital Integrated System Manager

- Integrated Public Address and Voice Alarm controller
- High Flexibility and Extendible via Ethernet (TCP/IP)
- 8 Channels Power Matrix
- High Acoustic Performance
- Built-in Fault Diagnosis
- Automatic Volume Control



X-DCS2000 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. With powerful audio matrix structure, X-DCS2000 is capable of bringing value to big infrastructures in terms of saving extension and cabling.

Features

INPUT/OUTPUT

DCS can connect up to 8 amplifier channels and support 4 x 8 audio matrix for both local audio input and network audio routing.

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

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 3 network A/D audio input, which provide connections to external audio sources such as CD/DVD, cassette, FM tuner etc. With addition X-ND100 Noise Detector, AVC (Automatic Volume Control) function can be active. 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 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 loudspeaker line 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. DCS has two backup amplifier channel to standby for 8 main amplifier channel. It is configurable for backup strategy by config software.

AUDIO STORAGE

DCS is built with flash memory which can store up to 60 minutes voice message. 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-NPMS, 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.

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

8 DCL inputs

8 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

Specifications

Parameters	Values
Main power supply voltage	AC 100~240V, 50/60Hz
Backup power supply voltage	DC 21.5V-28.5V
DC power output	DC24V/1A
Main power supply fuse	T2AL 250V
Rated power	50W
Auxiliary input	
Channels	3
Auxiliary input	AUX1: 0dBV (1V)
	AUX2、3: -40dBV~0dBV
Input impedance	10KΩ
Frequency response	60Hz-16KHz (local input signal)
SNR	>85dB
Audio output	
Channels	8 channels main power amplifier,
	2 channels standby power amplifier,
	2 channels auxiliary output
Output signal	1.2V(<1.6dBV)
Record output	1V(0dBV)
THD	<0.06%
DCL Inputs	
Channels	8
Module Number	5 modules per channel
Module Type	Noise Detector, EOL module
Loudspeaker circuit	
Output Voltage	100V
Channels	8 (with circuit fault detection)
Max. Output load power	500W
Contact Input /Output	
Contact input	8(with circuit fault detection)
Contact output	8 outputs (NO, NC and COM)
Maximum voltage of the outputs	250V AC / 30V DC
Maximum current of the outputs	2.5A
Other	
Monitoring loudspeaker	10W/8Ω
Ethernet interface	10M/100M
Ethernet switching	4 ports
Memory capacity	1GB (606MB for audio files)
Working conditions	
Working temperature	-10°C to +55°C
Storage temperature	-40°C to +70°C
Humidity	<95%, without condensing
Specification	
Dimension (W×H×D)	482 mm×88 mm ×420mm
Packing dimension (W×H×D)	580mm×235mm ×552mm
Net weight	9.3Kg
Gross weight	12.5Kg

Packing List

No.	Product Name	Qty.
1	X-DCS2000 main appliance	1
2	Labels	6
3	Dry contact input wiring terminal (8P)	2
4	Dry contact output wiring terminal (6P)	4
5	Loudspeaker wiring terminal (8P)	2
6	Power amplifier wiring terminal (16P)	1
7	spare power amplifier wiring terminal (4P)	1
8	Module wiring terminal (8P)	2
9	DC power wiring terminal (4P)	1
10	DC output wiring terminal (4P)	1
11	Twist-pair Cable (2 m)	1
12	Audio Cable	1
13	AC power cable	1
14	Fuse (2A)	1
15	Product Instructions	1
16	CD-ROM	1