X-618 Public Address and Voice Alarm System

Operation Manual



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Safety Guidelines





Danger

This sign reminds users that the product contains equipment that has dangerous levels of high voltage.



Caution

This sign reminds users of important instructions attached to the product.

Safety Guideline

To prevent an electric shock, do not use an extension cord when connecting the appliance to a plug outlet. Do not block the appliance air vents by placing other equipment on top of it.

Safety Guideline

Do not expose the appliance to rain or moisture to avoid causing a fire or an electric shock.

Safety Precautions

For the installation, operation, and use of this product, please carefully read the following precautions.

Electrical Safety

- The product installation and use must comply with local electrical safety regulations.
- Honeywell assumes no liability for user errors or misuse that result in a fire or an electrical shock.

Transportation Safety

During transportation, do not violently shake the appliance or expose it to corrosive liquids.

Environmental Requirements

- Do not install the appliance in an environment with extreme temperatures or excessive amounts of dust.
- The appliance should be placed away from direct sunlight in a well-ventilated, clean, and stable environment without vibrations or shocks. The optimum working environment temperature is 5 28 °C with a relative humidity < 95%. If the equipment is in operation for a long time and the ambient temperature is too high, it is recommended that effective measures be taken to reduce the temperature.
- The required appliance power supply voltage is AC 220V (-15% ~ +10%) 5- ~ 60 Hz. If the
 voltage is too high, too low, or fluctuates too drastically, it is recommended to install a stable
 AC power source.

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- The appliance is not waterproof. Do not expose the appliance to rain or moisture to avoid damage.
- Place the appliance on a level, stabilized surface or rack.
- Do not place other items on top of the appliance.

Safe Use Precautions

- Install the equipment under the guidance of qualified technicians.
- Before using the appliance, make sure that the power cables are not damaged. The power cables must clearly show quality and safety inspection labels.
- The power plug and outlet prong configuration must match. If the plug outlet does not match the prong configuration of the plug, the outlet must be replaced with one that matches the plug.
- The appliance must have a sufficient power source and an independent grounding wire.
- Note that the equipment must be properly grounded. Otherwise, the equipment could fail to work properly or be damaged.
- When the power is turned on, high voltage runs through the power lines and the appliance. Do
 not open the appliance to prevent an electric shock.
- When installing the appliance, make sure the wires and cables are configured correctly to avoid damage to the equipment.
- When the power is turned on, do not touch power terminals with lightning safety logos to prevent an electric shock.
- When the power is turned on, do not physically alter the appliance to avoid damaging the equipment.
- Honeywell assumes no liability for appliance malfunctions. Please consult qualified technicians for repairs.

Manual Labels and Information

- Please note the product labels, product categories, power requirements, and other information.
- Read this manual thoroughly and use the equipment in accordance with the provided instructions. This manual can be used as a reference for other components related to this product. For more specific information, contact Honeywell.
- Keep this manual for future reference.

Standard and Certification

Standards to be followed and relevant certification information obtained for X-618 Public Address and Voice Alarm System are introduced.

CCC Certification Description



CCC (China Compulsory Certification) is "CCC" authoritative certification composed of Conformity Certification of Electrical Equipment (CCEE), China Commodity Inspection Bureau (CCIB) and Electromagnetic Certification (EMC).

CCC mainly imposes compulsory certification on products involving human health and safety, animal and plant life and health, environmental protection and public safety. It is a advanced sign for General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and Certification and Accreditation Administration of the People's Republic of China to be in line with international practice and has irreplaceable significance.

CCCF Certification



CCCF (China Certification Center for Fire Products Ministry of Public Security) certification means the product authorized by the Public Security of the People's Republic of China.

CE



CE(Conformite Europeenne) means the products marked with CE meet 89/336/EEC and 73/23/EEC issued by European Commission.

EN 54-16 Certification

The public broadcasting system certified by ?? in mm yy and meeting the latest international standards of Emergency Broadcasting:

EN 54-16

UL Certification



UL (Underwriter Laboratories Inc.) is not-for-profit product safety testing and certification organization.

UL has its own certification system for the complete products, components and materials. Electrical equipment to be exported to USA must be certified by UL.

UL safety certification has the following three forms:

Listing

UL listing is the most popular service among UL safety certification. UL listing mark on products means that producers ask UL to test samples according to safety standards recognized by USA and the samples will not cause hazards such as fire and current leakage in reasonable and foreseeable cases.

Classification

UL classified products are tested according to different nature, designated hazard scope or special conditions. Classified products generally refer to building materials or industrial instruments. Classified products include industrial or commercial products and are provided with designated nature (including inflammability, hazard or special specification as required by the government) when tested.

License

UL licensed element service is for testing parts and components or non-finished articles. These elements will be used for UL listed products. UL licensed element service covers from millions of plastics, electrical power lines and wiring boards to various finished products, even large-sized elements such as motorcycle or power supply.

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Preface

Thanks for buying X-618 Public Address and Voice Alarm System. In the following sections the X-618 Public Address and Voice Alarm System is referred to as the "X-618 system". Please carefully read this manual prior to product use so as to ensure correct use of the system.

Brief Introduction

This manual mainly describes the main hardware products of X-618 system. The following chapters are included:

Chapter 1: X-DCS200 Operations Guide

This chapter describes the basic operations and relevant precautions of the X-DCS2000.

Chapter 2: X-DA2250 Operations Guide

This chapter describes the basic operations and relevant precautions of the X-DA2250.

Chapter 3: NPM Operations Guide

This chapter describes the basic operations and troubleshooting of the NPM.

Intended Audience

This manual is mainly for personnel who are to use the X-DCS2000 system.

Relevant Documents

The following documents can be used as a reference when reading this manual:

- X-618 Public Address and Voice Alarm System Product Description
- X-618 Public Address and Voice Alarm System Installation Manual
- X-618 Public Address and Voice Alarm System Configuration Manual

Use Instructions

- All content including figures in this manual are to be used only for reference.
- The product may be subject to change from time to time without notice.
- It is strongly recommended that users read all warnings and precautions in this manual carefully.
- Carefully read this manual before using the product and keep it as a reference for future use.
- This manual has been reviewed with its accuracy is ensured. In case of any doubt or dispute
 of the product description, the final interpretation given by the Life Safety A/V (Guangzhou)
 Co., Ltd. shall prevail.
- The Life Safety A/V (Guangzhou) Co., Ltd is not liable for any consequences caused by user mistakes when using the product or user misunderstandings of the manual content.

1 X-DCS200 Operations Guide

The X-DCS2000 Digital Integrated System Manager is hereinafter referred to as the "DCS" or "X-DCS2000".

The X-DCS2000 is a broadcasting control device that expands broadcasting zones and supports multiple sound sources. The X-DCS2000 integrates with functions such as the sound source file storage system, network audio broadcasting system, the loudspeaker zone control system, and the system for monitoring and diagnosing faults. The DCS integrates well and is easily configured.

Mainly describes the basic operations and precautions of the DCS system.

Powering the DCS On and Off

The system powers on when the power switch is in the "I" position, and powers off when the switch is in the "O" position.

When the indicator light for the main or standby power supply on the front panel of the DCS turns green, the respective power supply is working normally.

When the power supply indicator light turns orange, the respective power supply has experienced a fault. Check whether the power supply is connected correctly and that the DCS power switch is turned on.

System Reset

If the DCS must be reset, press the **Function + Self-test + Reset** buttons simultaneously, causing the system to reset automatically.



Caution:

Only reset the system when necessary to avoid data loss.

Fault Confirmation

When the system detects a fault, a failure prompt tone is heard.

Press the **Fault** button to confirm the fault. The prompt tone stops, and the fault indicator light turns orange.

Equipment State Restoration

When the system fault has been identified and fixed, the equipment state needs to be restored.

Press the **Reset** button to reset the equipment state. All fault indicator lights are restored to their normal states, and the fault prompt tone stops.

System Self-Test

The DCS self-test function is activated by pressing the **Self-Test** button on the front panel. Operation steps involve the following:

 Press the Self-Test button to activate the self-test function for the DCS and equipment connected to the system.

All of the indicator lights that display just one color are turned on. All of the lights that can display two colors switch back and forth between these two colors. The fault indication buzzer rings continuously, and the monitoring loudspeaker plays the self-test voice.

2. Press the **Self-Test** button again to stop the self-test program.



Note:

- The self-test function does not affect the normal operation of other functions unrelated to the self-test function. For example, if the self-test function is initiated during voice broadcasting, the voice broadcast function is not interrupted and only the associated indicator lights will flicker.
- The system times out in one minute by default. If the self-test function occurs for a
 minute without being manually halted, the system automatically stops the self-test function.

Zone Selection

A zone is selected by pressing the button that represents the zone. Press the selected zone button again to deselect the zone.

Press the **Select All** button on the DCS front panel to select all zones, and press this button again to deselect them.

Zone state indicator lights have the following meanings:

- A solid orange light indicates the zone has been disabled or has short-circuited.
- A flickering orange light indicates the zone has an open circuit.
- In the general-purpose broadcasting mode, a green light indicates that the system is broadcasting.
- In the emergency broadcasting mode, a red light indicates the system is broadcasting fire emergency information.
- A flickering green light indicates the zone has been selected. When the light is off this indicates the zone is either not selected or is not in use.
- If a zone is selected and no other operation is performed for more than one minute, the zone indicator light automatically returns to its original state.

Zone Monitoring

The DCS can monitor sound being broadcast in certain zones. Perform the following steps to monitor sound being broadcast in particular zones:

- Press the Monitoring button.
- 2. Select the zone to be monitored. The monitoring loudspeaker plays the sound being broadcast in the selected zone.
 - The DCS can only monitor one zone, and the system automatically cancels the previous zone that has been selected if another zone is selected.
- 3. Press the **Monitoring** button again to stop zone monitoring.

Time Delay Cancellation

When the DCS is performing the time delay task, the time delay indicator light turns on. If the broadcast is to be performed immediately, then the time delay needs to be cancelled by pressing the **Time Delay button**. When the button is pressed, the system automatically initiates broadcasting.

Volume Control



Note:

Note that the sequence to select sound sources is also the sequence to select audio channels.

The sound volume of the power amplifier channels is adjusted by pressing combinations of buttons simultaneously, as shown in Table 1.

Table 1 Power Amplifier Audio Channel Sound Volume Controls

Channel No.	Increase Volume	Decrease Volume
1	Function + PA1 (1))	Function + PA1 ()
2	Function + PA2 (1))	Function + PA2 ()
3	Function + PA3 (1))	Function + PA3 (1)
4	Function + PA4(1))	Function + PA4 ()

Controlling Broadcasts

This section describes how to use the X-DCS2000 for public broadcasting, including general-purpose broadcasting and fire emergency broadcasting.

The system can broadcast four different sound sources at most in different zones.

General-Purpose Broadcasting

General-purpose broadcasting includes playing background music, voice messages, and external input sound sources.

When the system is being debugged, the buttons of sound sources corresponding to the sound source files in the software configuration must be set.

To make a general-purpose broadcast, follow the steps below:

- Select the zone or zones for the broadcast.
 - Press the **Zone** button to select a zone or zones. Multiple zones can be selected. To select all zones, press the **Select All** button. Indicator lights for selected zones flash green.
- 2. Select the sound source or sources to be broadcast.
 - Press the **Sound Source** button to select the sound sources.
- 3. Previewing the sound source is available if the sound source indicator light flashes green. Press the associated sound source button again to confirm the sound source. Press the Close button to cancel or stop previewing the sound source. Press the sound source button once more to confirm the sound source selection and begin broadcasting. If the sound source button is not pressed within a one minute time frame, the system automatically cancels previewing the sound source.
 - The sound source is broadcasted according to the configuration policies set in the software.
- Both broadcasting in selected zones or a specific sound source that is being broadcasted can
 be stopped, as is described below. To stop broadcasts in specific zones, follow the steps
 below:
- 1. Select the zones in which the broadcast is to be stopped.
- 2. Press the **Close** button to stop broadcasting in the selected zones.
- To stop broadcasting a particular sound source, follow the steps below:
- 1. Press the Close button.
- 2. Select the sound source button representing the sound source that is to be stopped, and then stop the broadcasts occurring in the zones that are broadcasting the particular sound source.

Emergency Broadcasting

If the DCS connects to the fire control or detection alarm, the fire alarm system automatically sends fire alarm signals to the DCS when fire alarm signals are detected.

To manually make an emergency broadcast, follow the steps below:

- 1. The emergency broadcasting mode is initiated by receiving a fire control alarm activation signal and/or by pressing the **Emergency Mode** button.
- 2. Select the zone or zones for the broadcast.
 - Press the **Zone** button to select a zone or zones. Multiple zones can be selected. To select all zones, press the **Select All** button. Indicator lights for selected zones flash green.
- Select the sound sources. Previewing the sound source is available if the sound source indicator light flashes green. Press the associated sound source button again to confirm the sound source.
 - The built-in loudspeaker broadcasts according to the play policy.
- 4. Press the associated sound source button again to confirm the sound source.
- 5. Broadcasting is controlled according to the broadcasting scheme.
- 6. When monitoring a broadcast, press the **Monitoring** button to stop the monitoring process.
- 7. When the system receives a fire stop signal or the **Emergency Mode** button is pressed a second time, the emergency broadcasting mode ends.
- Select the zone or zones to be closed.
- 9. Press the **Close** button to stop the emergency broadcasting.

Emergency Voice Broadcasting

To make an emergency voice broadcast, follow the steps below:

- 1. Press the Emergency Mode button to enter this mode when receiving the fire activation signal.
- 2. Select the zone or zones for the broadcast.
 - Press the **Zone** button to select a zone or zones. Multiple zones can be selected. To select all zones, press the **Select All** button. Indicator lights for selected zones flash green.
- 3. Press and hold the switch on the left side of the emergency microphone to speak into the microphone and make a voice broadcast.
- 4. Release the switch on the left side of the emergency microphone to stop voice broadcasting.



Note:

- Emergency voice broadcasting is of the utmost priority.
- During emergency voice broadcasting, the DCS records the broadcast content automatically.
- The record duration is 30 minutes.

2 X-DA2250 Operations Guide

The X-DA2250 High Efficiency Power Amplifier is referred to as "DA" throughout the remainder of this manual.

The DA amplifies audio signal power it receives from audio input devices to maintain clarity and volume when broadcast over many speakers.

Powering the DA on and Off

The system powers on when the power switch is in the "I" position, and powers off when the switch is in the "O" position.

When the indicator light for the main or standby power supply on the front panel of the DA turns green, the respective power supply is working normally.

When the power supply indicator light turns orange, the respective power supply has experienced a fault. Check whether the power supply is connected correctly and that the DA power switch is turned on.

Precautions

When using the DA, pay particular attention to the following issues.



Notice:

Make sure all cables are connected properly before turning on the DA.

Pay particular attention to which audio input source is selected and configure the output signal level appropriately, as this can save electricity.

Do not connect the grounding output cable with the grounding input cable as this causes a short circuit to occur.



Warning!

Do not alter the circuit board or schematic diagram.

When the **CLIP** indicator light is flashing red, immediately reduce the audio volume. If peak clipping occurs for too long, the DA could be damaged.

If the audio signal or peak clipping signal is too high, the speakers could be damaged.

3 NPM Operations Guide

The NPM has features including an interactive touchscreen, the ability to configure preset broadcasting programs, zone paging, broadcast monitoring, and a bidirectional intercom function. The NPM is also capable of paging and controlling broadcasts on zones throughout the X-618 system.

Initializing the NPM

The following steps describe how to start the NPM:

1. After connecting the NPM to the power supply, the NPM initialization touchscreen displays the interface that is shown in Figure 1.



Figure 1 NPM initialization interface

2. When the NPM finishes loading, as indicated by the progress bar, the interface shown in Figure 2 appears. Enter the password using the number pad on the right side.



Figure 2 General-Purpose Broadcasting Interface

1. Touch **OK** after entering the password. The general-purpose broadcasting mode is initiated as shown in Figure 3.

The prompt "Password is incorrect, please enter it again!" is shown if an incorrect password is entered. Touch **Reset** to enter the correct password.



Note:

The maximum length of the password is 8 characters. Contractors and Administrators have the necessary privileges required to modify the password, but Operators cannot.



Figure 3 General-purpose broadcasting mode interface

The following information describes the icons shown in Figure 3:

- Touch the icon to initiate general-purpose broadcasting.
- Touch the icon to initiate configured broadcasting.
- Touch the icon to monitor broadcasts.
- Touch the icon to initiate the bidirectional intercom.
- Touch the icon to configure the system settings.
- Touch the button on the left side of **Group/Zone** to select groups.
- Touch the button on the right side of **Group/Zone** to select zones.
- Touch Select All to select all zones.
- Touch Cancel to cancel the selection.
- Touch Paging to turn on the microphone for paging.

Emergency Broadcasting

The following steps describe how to conduct an emergency broadcast through the NPM:

 When the EMERGENCY button is pressed, the manual emergency broadcasting mode is initiated as shown in Figure 4.



Figure 4 Password entry interface

- Select the corresponding zone or group of zones as necessary.
 A blue status bar appears above selected zones or groups.
- Touch the button on the left side of **Group/Zone** to select groups.

- Touch the button on the right side of **Group/Zone** to select zones.
- Press the Select All button on the NPM front panel to select all zones, and press the button again to cancel the selection.
- 3. Select the emergency broadcasting sound sources as necessary.

General-Purpose Broadcasting



Note:

Group, zone, and sound source information can only be defined by Administrators or Superusers. Operators can only select groups, zones, and sound sources.

The following steps describe how to use the NPM to make a general-purpose broadcast:

1. Touch the icon to display the interface as shown in Figure 5.



Figure 5 Zone/group selection interface

- Select the zones or groups that are to receive the broadcast. Multiple zones or groups can also be selected.
- Touch the button on the left side of Group/Zone to display all groups.
- Touch the button on the right side of Group/Zone to display all zones.
- 3. Select the sound source. If more than four sources need to be selected, touch **More sound sources**..... displaying the interface show in Figure 6.



Figure 6 Additional sound source selection

4. Touch **Paging** or press the **TALK** button on front panel of the NPM to start the bidirectional intercom function of microphone, and begin speaking to the selected zone. The interface as shown in Figure 7 appears.

Press the TALK button to use either the **Press** or **Toggle** trigger operation modes.

Press trigger operation: Press and hold the TALK button to begin speaking, and then
release the button to release the selected zones and stop speaking. Toggle trigger
operation: Press the TALK button to begin speaking, and then press it again to release
the selected zones and stop speaking.



Figure 7 NPM paging interface

5. After the paged voice broadcast ends, touch **End paging** to complete general-purpose broadcasting.

Configurable Broadcasting

This section describes NPM configurable broadcasting. Self-defined broadcasting functions can be configured through the system software.



Note:

Broadcast settings are configured by an Administrator or Superuser. Operators can only select the configured functions.

The following steps describe how to configure broadcasting settings:

1. Touch the icon. The interface as shown in Figure 8 appears.



Figure 8 Configurable broadcasting interface

 By selecting the "Self-defined mode", self-defined modes of broadcasting can be initiated by just pressing a single button of which the button broadcasting settings have been previously configured. Monitoring Broadcasts

The following steps describe how to use the NPM to monitor a broadcast:

1. Touch the icon. The interface as shown in Figure 9 appears.





Figure 9 Monitoring broadcast interface

- 2. Select the zone that is to be monitored. Only one zone can be monitored at a time.
 - Touch the or buttons to move up and down the list of zones to find the zone to be monitored.
- 3. Touch the **Start monitoring** button to start monitoring the broadcast being played in the selected zone. Press the button again to stop the monitoring function.

Bidirectional Intercom Function

This section describes how to use the NPM to communicate with another NPM in selected zones.

Initiating the Intercom Function

The following steps describe how to initiate the bidirectional intercom function:

1. Touch the icon. The interface as shown below in Figure 10 appears.



Figure 10 Bidirectional intercom interface

- 2. Select an NPM with which to communicate.
- 3. Touch the **Start talking** button to initiate the communication request. The interface as shown below in Figure 11 appears.



Figure 11 Intercom request has been made

Wait until the opposite party has received the communication request.

4. When the opposite party receives the intercom request, the two parties can begin the conversation.

When the opposite party cannot receive the communication request, the interface shown below in Figure 12 appears.



Figure 12 The opposite party cannot currently be contacted

Receiving an Intercom Request

1. When a request from another NPM is received, the interface shown below in Figure 13 appears.



Figure 13 Receiving a communication request

- 2. Select whether to accept the communication request.
 - Select Start talking to accept the communication request.
 - Select End talking to return to the previous page.

System Configuration

This section describes how to configure the NPM system settings.

The NPM system configuration includes viewing the IP address, setting the system time, adjusting the volume, and calibrating the touchscreen.

Fouch the icon to display the system configuration interface.

Viewing the IP Address

On the system configuration screen, select the **View IP** option. The interface shown in Figure 14 appears. User can view the IP address, subnet address, and DNS gateway address.





Figure 14 Viewing the IP address information

Setting the System Time

On the system configuration screen, select the **Time setting** option. The interface as shown in Figure 15 appears. Users can set the system date, time, and standby time.



Figure 15 System time configuration interface

Setting the Volume

On the system configuration screen, select the **Volume setting** option. The interface shown in Figure 16 appears. Users can also adjust the microphone and broadcasting volume.

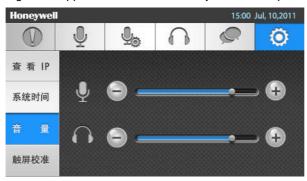


Figure 16 Volume adjustment interface

Calibrating the Touchscreen

1. On the system configuration screen, select the **Screen calibration** option. The interface shown in Figure 17 appears.



Figure 17 Calibrating the screen interface

2. Touch the **Return** button to return to the main interface.

Troubleshooting

The following list of causes and corrective actions can be referenced when attempting to troubleshoot issues with the NPM:

Issues	Possible Causes	Corrective Action	
Nothing	A power failure has occurred or an incorrect power adapter is being used	Replace the power adapter. Note: The NPM uses a DC 12V/1A power adapter.	
displays on the screen	The NPM is in the standby state	Press any key to "wake up" the screen so it can be used.	
	The NPM failure	Contact Honeywell or the appropriate equipment vendor for timely maintenance.	
Cannot	Not familiar with the operation of the equipment	Please carefully read the Operation Manual.	
perform broadcasting	Incorrect or invalid broadcasting NPM system configuration	Double check the configuration settings of the NPM functions through the X-618 system configuration software.	
Cannot use the bidirectional intercom function	Incorrect or invalid NPM system configuration	Double check the NPM configuration settings through the X-618 system configuration software.	
	Opposite party is not online	The opposite party must be online to initiate the bidirectional intercom function.	
No sound when speaking	Incorrect paging operation performed	Follow the paging directions in section 3, NPM Operations Guide	
	The volume of the NPM is very low	Adjust the volume of the microphone.	
No sound when monitoring	The volume of the monitoring loudspeaker is very low	Adjust the volume of the monitoring loudspeaker.	

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