Fully Digital Conference System

VZ 8000

User Manual V2.1.1

KLOTZ systems

Conference System – VZ 8000 - User Manual
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This is the product information of the Conference System **VZ 8000** by KLOTZ System Limited.

Number of this document: see footer.

Specifications are subject to change without notice.

Contents

PLEASE MAKE SURE TO READ THIS MANUAL CAREFULLY BEFORE TAKING VZ 8100CU CONTROLLER INTO OPERATION

SAFETY INSTRUCTIONS AND READER'S INFORMATION

There is a certain **hierarchy of warnings** in **this manual**. The warnings are printed in **bold letters** and are marked by a warning sign at the margin.

1. WARNING
2. CAUTION
3. NOTE

The term **WARNING** will be used wherever **danger is imminent**. The possible consequences may be death or severe injury (personal injury).

The term **CAUTION** will be used wherever a **dangerous situation is possible**. The possible consequences include death, severe or light injury (personal injury), damage to property (destruction of modules) or environmental hazards (fire damage). In any case, the failure to observe/comply with these instructions will result in the loss of guarantee.

The term **NOTE** will be used for marking **recommendations on the use**. These sections contain additional information, recommendations, hints and tips. Non-compliance with these recommendations may result in damage to property, e.g. to the system or the software.

General Safety Instructions

1. Read all instructions. Read all safety and operating instructions before operating the product.
2. Retain all instructions. Retain all safety and operating instructions for future reference.
3. Heed all warnings. You must adhere to all warnings on the product and those listed in the operating instructions.
4. Follow all instructions. Follow all operating and product usage instructions.
5. Heat. This product must be situated away from any heat sources such as radiators, heat registers, stoves, or other products (including power amplifiers) that produce heat.
6. Ventilation. Slots and openings in the product are provided for ventilation. They ensure reliable operation of the product and keep it from overheating. Do not block or cover these openings during operation. Do not place this product into a rack or studio furniture unless proper ventilation is provided and the manufacturer's recommended installation procedures are followed.
7. Water and moisture. Do not operate this product in the presence of rain, water or condensing moisture. Failures due to moisture entering the enclosure will not be covered under the warranty.
8. Debris. Do not allow any conductive objects of debris to enter through vents. Conductive debris entering the vents is likely to cause failure or performance degradation. Failures due to foreign objects entering the enclosure will not be covered under the warranty.
9. Attachments. Do not use any attachments not recommended by the product manufacturer as they may cause hazards.
10. Power sources. You must operate this product using the type of power source indicated on the marking label and in the installation instructions. If you are not sure of the type of power supplied to your facility, consult your local power company.

11. Voltage select switch. Ensure that the voltage select switch for the power supply of the product is in the correct position for the type of voltage you use in your country (e. g. 115 V AC or 230 V AC).
12. Grounding and polarization. Precautions should be taken so that the grounding or polarization is not defeated.
13. Power cord protection. Power supply cords must be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to the cords at plugs, convenience receptacles, and at the point where they exit from the unit. Do not defeat the earth grounding connection in the AC power cord.
14. Power cord. If you have not been provided with a power cord you're your product or for any AC-powered option intended to be used with your system, you should purchase a power cord that is approved for use in your country. The power cord must be rated for the product and for the voltage/current marked on the product's electrical ratings label defined in the user manual. The voltage/current rating of the power cord should be greater than the voltage/current rating marked on the product.
15. Lightning. For added protection for this product, unplug it from the AC wall outlet during a lightning storm or when it is left unattended and unused for long periods of time. This will prevent damage to the product due to lightning and power line surges.
16. Overloading. Do not overload AC wall outlets, extension cords, or integral convenience outlets as this can result in a fire or electric shock hazard.
17. Object and liquid entry. Never

push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts, which could result in a fire or electric shock. Never spill liquid of any kind on the product.

18. Mounting accessories. Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury and serious damage to the product. Any mounting of the product must follow manufacturer's installation instructions.

19. Product and cart combination. Move this product with care. Quick stops, excessive force, and uneven surfaces may cause the product and the cart combination to overturn.

20. Servicing. Refer all servicing to qualified servicing personnel.

21. Damage requiring service. Unplug this product from the wall AC outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power supply cord or plug is damaged.
b. If liquid has been spilled or objects have fallen into the product.
c. If the product has been exposed to rain or water.
d. If the product does not operate normally (following operating instructions).
e. If the product has been dropped or damaged in any way.
f. When the product exhibits a distinct change in performance. This indicates a need for service.

22. Replacement parts. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards and will void warranty.

23. Options and upgrades. Use only the options and upgrades recommended by the manufacturer.

24. Safety check. Upon completion of any repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

25. Hot surfaces and electric discharge.
Allow the equipment's internal components (e.g. heat sinks) and hot pluggable system units to cool and/or discharge before touching them in case of any further handling.

26. Cleaning. Do not use liquid or aerosol cleaners. Use only a damp cloth for cleaning.

This product with the CE marking complies with the following standards and directives of the Commission of the European Community:

73/23/EEC Low voltage directive
IEC 950/EN60950 Electrical safety

89/336/EEC EMC directive
EN 55103-1 Electromagnetic interference - emission
EN 55103-2 Electromagnetic susceptibility - immunity

This product is intended for use in the following electromagnetic environments:

- **E1 (residential)**
- **E2 (commercial and light industrial)**
- **E3 (urban outdoors)**
- **E4 (controlled EMC environment, e.g. broadcast studio)**

All KLOTZ products have been developed, produced and tested accurately and according to the above named directives.

NOTE!

Improper handling of HF equipment like radio transceivers and mobiles can cause radio interferences on KLOTZ devices. For working reliability reasons it is strongly recommended not to use radio transceivers and mobiles near the devices!

Warning Symbols on Equipment

The following table contains safety icons that may appear on KLOTZ equipment. Refer to this table for an explanation of the icons and heed the warnings that accompany them.

This symbol, when used alone or in conjunction with any of the following triangle icons, indicates the need to consult the operating instructions provided with the product. **WARNING!** A potential risk exists if the operating instructions are not followed.

This symbol indicates the presence of electric shock hazards. Enclosures marked with these symbols should only be opened by a KLOTZ DIGITAL authorized service provider. **WARNING!** To avoid risk of injury from electric shock, do not open this enclosure.

This symbol indicates the presence of a hot surface or component. Touching this surface could result in bodily injury. **WARNING!** To reduce the risk of injury from a hot component, allow the surface to cool before touching.

This symbol indicates the presence of a laser beam. **WARNING!** Failure to observe this warning could result in bodily injury, fire or damage to the equipment.

This symbol indicates an electrostatic sensitive device that is susceptible to ESD discharge. **CAUTION!** Failure to observe this warning could result in damage of the device/component.

This symbol indicates the need to turn off the main plug of the equipment before open the enclosure. **WARNING!** To avoid risk from electric shock, the equipment must be disconnected from mains.

This symbol defines the terminal for protective conductor (protective earth) only!

This symbol indicates the presence of mechanical parts that can result in pinching, crushing or other bodily injury. **WARNING!** To avoid risk of bodily injury keep away from moving parts.

1 Precautions – VZ 8100CU Central Controller

1.1 General Handling

In order to prevent injuries to persons and damage to the system consider the following directions:

- The assembly, disassembly and handling of control surface components must be carried out exclusively by qualified personnel.
- Service and repair must only be carried out by authorized service personnel. These directions are part of the warranty agreement.

CAUTION!

Turn off the VZ 8100CU Controller immediately under the following conditions:

- The power cord is damaged of frayed
- Liquid spills on or into the equipment
- Someone drops the control surface or damages the casing

CAUTION!

Do not:

- Push any foreign objects into the VZ 8100CU connectors
- Clean the VZ 8100CU before it is disconnected from the power supply system
- Eat or drink while operating the VZ 8100CU to avoid that crumbs or liquid enter the control surface cabinet

Take care of the following precautions:

- Avoid exposing the VZ 8100CU Controller to extreme changes in temperature or humidity. If it is unavoidable, allow your VZ 8100CU Controller to adjust to room temperature before use
- Avoid using the VZ 8100CU Controller for extended periods in direct sunlight
- Do not use the VZ 8100CU Controller in humid or dusty environments
- If the temperature of the VZ 8100CU Controller suddenly rises or falls (for example, when you move it from a cold place to a warm one), water vapour condenses inside the control surface. Turning on the VZ 8100CU Controller under this condition can damage the internal components. Before turning on the VZ 8100CU Controller, wait until the units internal temperature acclimatizes to the new environment and the inside of the control surface is dry again
- Maintain storage temperature between -20°℃ and 40°℃
- Keep the storage area free from vibration
- Keep the VZ 8100CU Controller and its components away from organic solvents or corrosive gases
- Avoid leaving the VZ 8100CU Controller and its components in direct sunlight or near heat sources

If there are heat sinks inside or outside the VZ 8100CU Controller, they can reach a temperature of more than 60°℃, which might cause a fire on the device.

Each VZ 8100CU Controller must be properly grounded according to your local specifications and regulations.

Electrostatic sensitive devices

Boards with electrostatic sensitive devices (ESD) are mostly marked with this symbol.

CAUTION!

If you handle boards assembled with electrostatic sensitive devices you must necessarily consider the following points:

- Always discharge yourself before you start working (e.g. by touching a grounded object)
- Make sure that the equipment and tools are free of static charges
- Pull out the power plug before you insert or remove boards containing electrostatic sensitive devices
- Always hold boards with ESDs by their edges
- Never touch pins or conductors on boards assembled with electrostatic sensitive devices
- Store and transport boards/components only in electrostatic protective wrapping

1.2 Ventilation System

For maximum efficiency of the VZ 8100CU Controller and its power supply's ventilation system a properly balanced airflow must be provided.

CAUTION!

To prevent the unit from being exposed to an over temperature condition, do not block air intakes or exhausts.

2 VZ 8000 Conference System Introduction

VZ 8000 is a fully digital conference system, which integrates discussion, voting and interpretation in one system, and can manage a large number of microphone units. As an intelligent conference system, one central controller of VZ 8000 can manage up to 250 microphone units. With the power injector device, VZ 8000 system can be connected up to 1000 microphones and unlimited number of channel selectors. Via RS232/RS422, VZ 8000 system can also connect to video tracking system.

The main features:

- Fully digital conference network, discussion, voting and interpretation combined in one system
- Intelligent design, 128 * 64 pixels LCD
- Support front panel key operation and software configuration
- 8 digital buses interface
- 24 channels interpretation and language distribution
- Support 3 key and 5 key voting
- 3 + 1 channels interpretation and language distribution interface
- Multiple conference modes are available
- Transmission of uncompressed digital audio in real time, broadcast quality
- Comes with 450W of power, supports 128 microphones
- Injects the power into the bus, can access 250 microphones
- Can be customized enhanced host, access to 1000 microphones in single machine, can access up to 8000 microphones by host cascade
- System supports access to 10 chairman microphones
- Can open up to 8 microphones speaking simultaneously, the number of speaking microphones can be set between 1 to 8
- 24 + 1 channels wired interpretation, can be customized 64 channels interpretation
- External audio output module and interpretation module, distribution 24 channels wireless interpretation language
- RS422 and RS232 communication port, can be used for PC software, external control or camera tracking
- Standard Ethernet port, support TCP/IP and external equipment remote control and system expansion
- CAT5 connection, saving wiring costs
- Two USB ports for updating the system and connecting external storage devices
- Local microphone input and line input interface
- Audio output interface on front panel, can be used for monitoring or recording in real time
- Can be installed in a standard 19-inch cabinet

The installation of VZ 8000 system is quite easy. All microphone units can be connected by CAT5 cables, and you just need to connect them with daisy chain.

2.1 Applications

The VZ 8000 system is one of the latest and most compact conference systems for commercial applications. By using the state-of-the-art technologies and numerous groundbreaking developments the VZ 8000 system can be used everywhere where flexibility and, above all, operational safety play an important role.

Therefore the VZ 8000 system fulfills the most important criteria which are expected from a modern conference system.

Typical locations are:

- School & Campus
- Hotel
- Conference Room
- Congress Center
- Expo Center
- Enterprise
- Government office
- Convention Center
- Stadium
- Shopping Park

Etc…

3 Overview of All VZ 8000 System Components

3.1 Central Controller

- Available for 19-inch frame mounting

3.2 Conference Unit

- Portable Chairman Microphone with LCD display
- Portable Delegate Microphone with LCD display
- Portable Chairman Microphone with voting function and LCD display
- Portable Delegate Microphone with voting function and LCD display
- Flush mount Chairman Panel with LCD display
- Flush mount Delegate Panel with LCD display
- Flush mount Chairman panel with voting function and LCD display
- Flush mount Delegate panel with voting function and LCD display
- Gooseneck microphones

3.3 Interpreter Set

- Portable/Flush mount Interpreter Set

3.4 Extension Unit

- Analogue audio output device
- Power Distributor
- Power Injector
- Channel Selector
- Voter

3.5 Optional Accessories

- Earphone
- Cables

4 VZ 8100CU Central Controller

VZ 8100CU is the central controller of the VZ 8000 system.

One Central Controller can connect 128 microphone units directly and provide power for them. With the power injector device, VZ 8000 system can be management up to 1000 microphones and unlimited number of channel selectors.

VZ 8100CU supports 24 interpretation channels and each booth can place 6 interpreter sets.

VZ 8100CU has high quality housing with oxidation brushed finished. It can be rack mounted 19" cabinet and standard 2U crate.

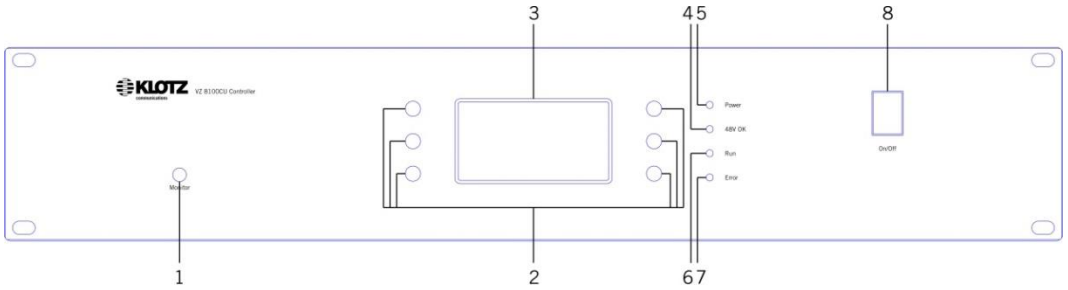
The maximum number of Chairman Microphones for VZ 8000 system is 10. They can be positioned anywhere among the system units in the chains.

Simultaneous microphone unit operation within a system is possible for up to 8 units.

Apart from the microphone unit connectors, the Control Unit offers inputs and outputs for the connection of interpreter sets and external equipment such as handheld microphone, language distribution equipment, background music and PA systems.

The VZ 8100CU offered RS232/RS422 interfaces. Via these interface the Central Unit can be controlled by PC software or by other external devices.

4.1 Front Panel



1：Monitor

Headphone jack can monitor the microphone 1 to microphone 8, local line input, local microphone input and 24 channels' interpretation output.

2：Buttons

These buttons are used for the system configuration or status check, its function depends on which page you choose to set.

3：LCD Display

The LCD displays the system status and setting information, etc.

4：48V OK

It indicates the power status of 8 buses of CU. The LED will light when the power failure occurs and the indicator will stay light until the failure is solved.

5：Power

It is used to indicate the power supply status of CU. The LED will stay light before turning off the power switch.

6：Run

When the CU is correctly connected to power supply, this indicator will flash rhythmical.

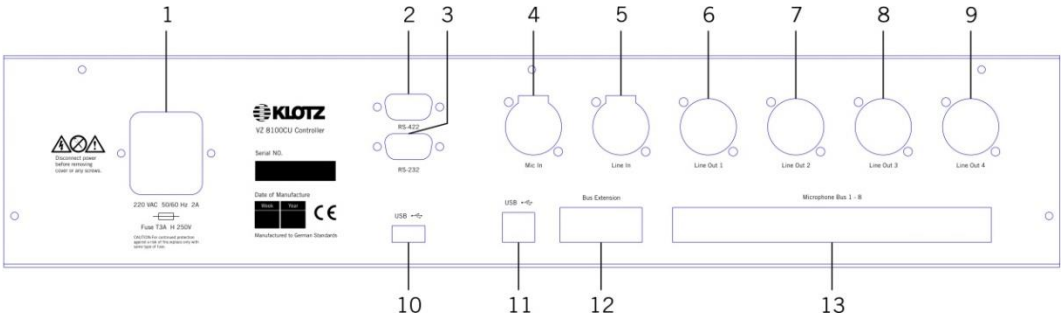
7：Error

This LED will be light if an error is detected and it will be light until the problem is solved.

8：Power Switch

The switch is used to control the power on and off.

4.2 Rear Panel



Connector 1: Power Connector

Connector 2: RS422 port

This connector is used for external control equipment with RS422 serial date communication.

Connector 3: RS232 port

This connector is used for external control equipment with RS232 serial date communication.

Connector 4: Local microphone input

This connector is used to connect the local microphone. (It can be configured on the CU that can choose the condenser microphone or dynamic microphone)

Connector 5: Local line input

This connector is used to connect the local line input.

Connector 6: Line output 1

This connector is used to output the audio signal of floor channel

Connector 7: Line output 2

This connector is used to output the audio signal of interpretation channel 1.

Connector 8: Line output 3

This connector is used to output the audio signal of interpretation channel 2.

Connector 9: Line output 4

This connector is used to output the audio signal of interpretation channel 3.

Connector 10: USB port type A

This connector is used to download and upload the configuration files.

Connector 11: USB port Type B

This connector is used to update the system.

Connector 12: RJ45 port

This connector is used for the system expansion.

Connector 13: 8 microphone buses

This connector is used to connect the Microphone, Interpreter Set, Channel Selector etc. And it can also provide the power for devices and drive 16 units directly.

4.3 User Interface Operating Instructions

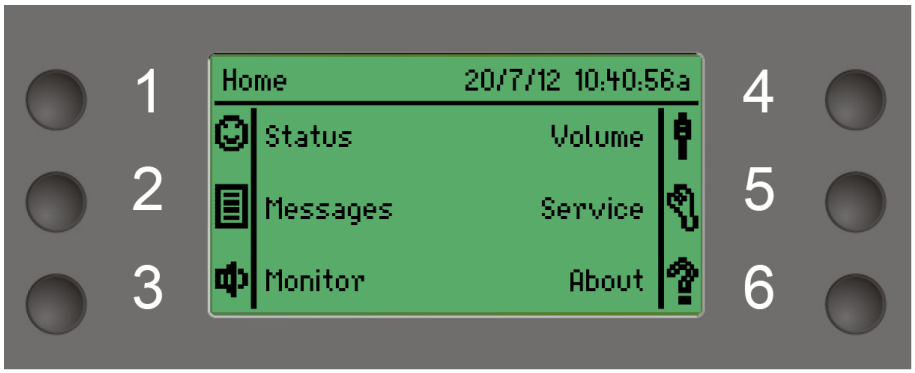
4.3.1 Start

After finishing the system connection, turn on the power switch, the central controller will start and search the device that connect to the controller. The LCD display will show the instruction as follow:

Note: For a better understanding and operating, use the numbers (1 to 6) indicate the buttons (button 1 to 6) in the following manual. These numbers are nonexistence on the panel, just for introductions in this manual.

4.3.2 Home

After initializing, the LCD display as follow:

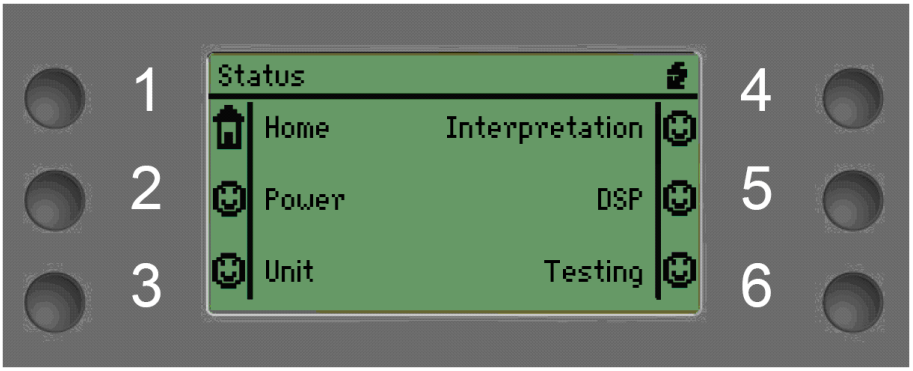


As soon as a new fault has been detected, the “Messages” will highlight display:

In home page, press buttons will enter corresponding page.

4.3.3 Status

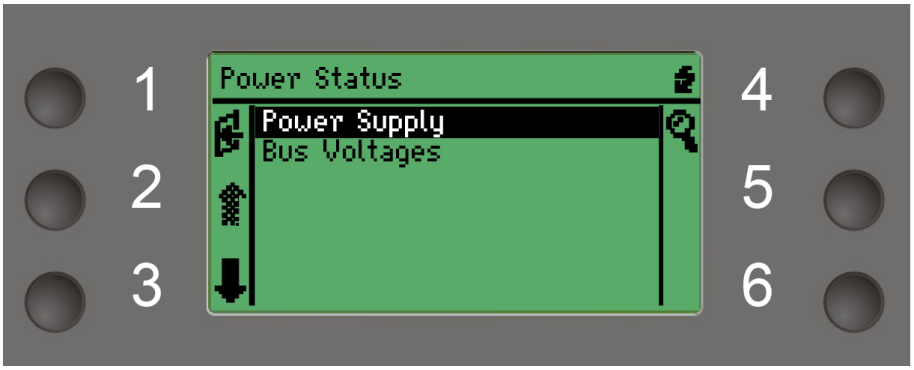
In Home page press button 1 enter the Status page. If there are any error needs to be confirmed, a lightning icon will appear on the upper right corner (This is the general case in other page except the Home page).



Press button 1 to go back Home page and press the other buttons enter corresponding page.

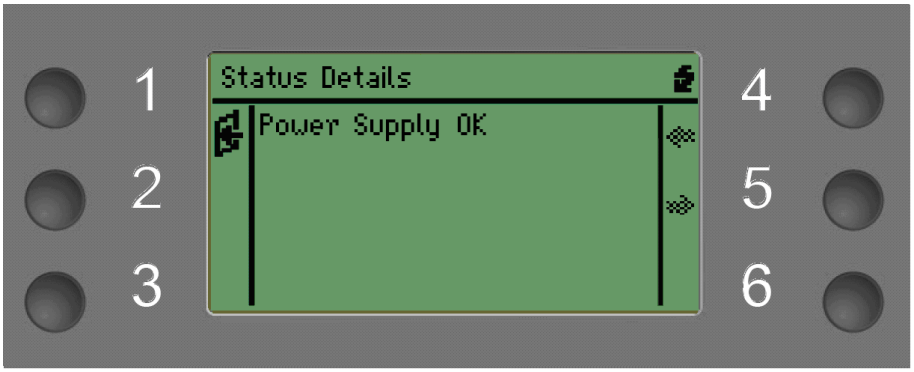
4.3.3.1 Power Status

Press the button 2 in the Status page to enter the Power Status page.

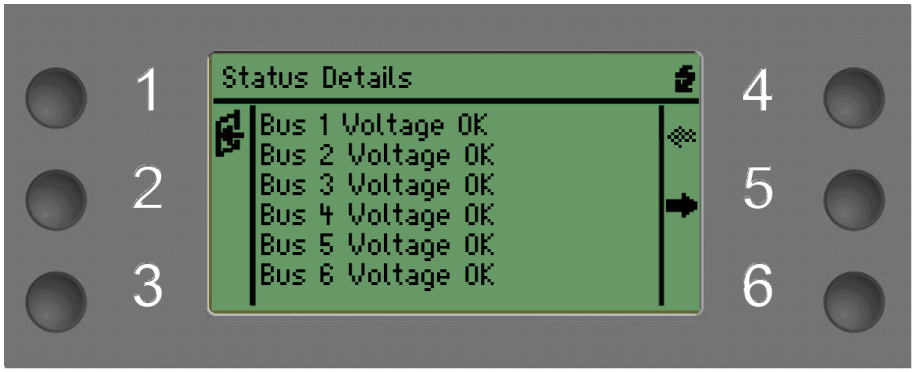


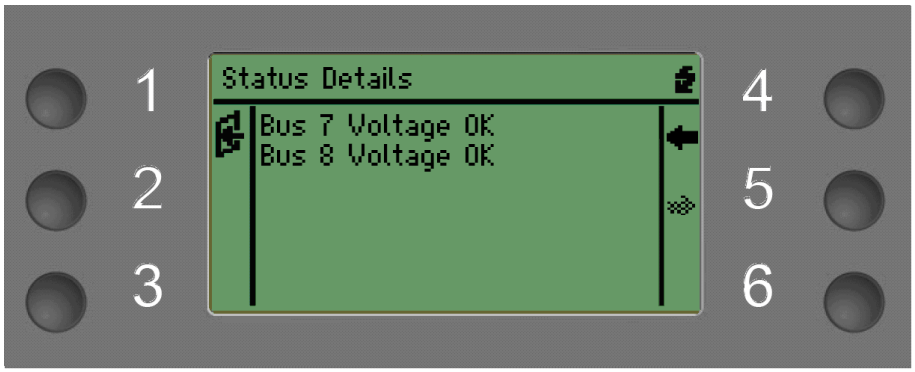
There are Power Supply and Bus Voltages selection available in the Power Status page, press button 1 to go back to the Power Status page, press button 2 and 3 to select, and press button 4 to enter the subpage for more information of the power supply.

Status Details of Power Supply:



Status Details of Bus Voltages:

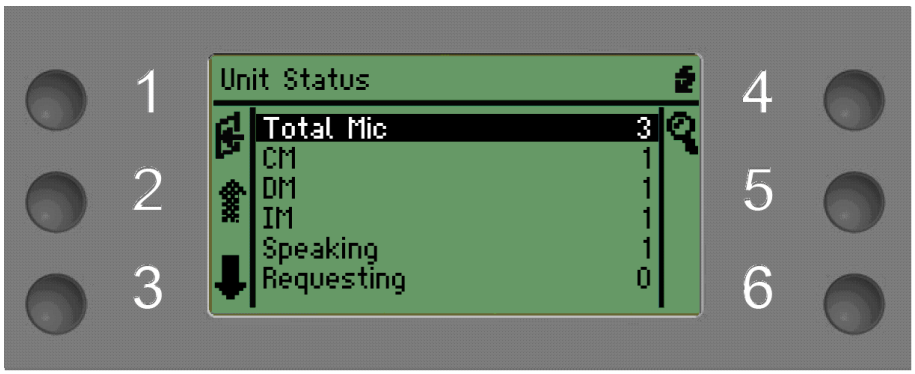




VZ 8000 system is equipped with 8 buses; you can check the status of each bus by pressing the button 4 or 5, and press button 1 to go back to previous page.

4.3.3.2 Unit Status

In the Status page, press button 3 to enter the Unit Status page:



Instructions:

Total Mic: total number of the connected Chairman Units, Delegate Units and Interpreter Sets;

CM: Number of the connected Chairman Units;

DM: Number of the connected Delegate Units;

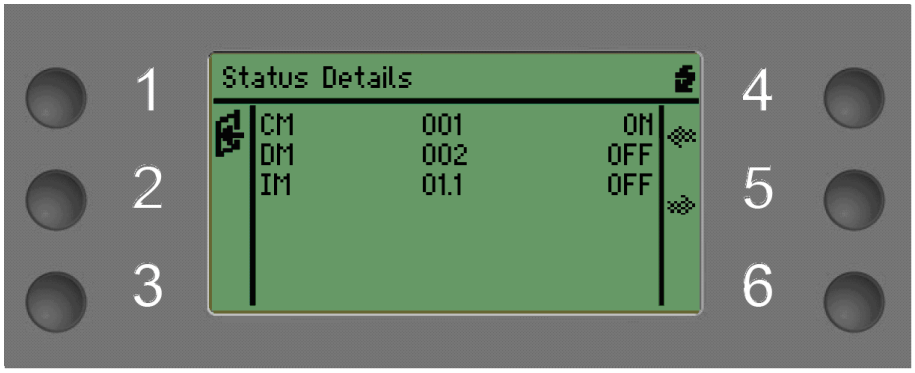
IM: Number of the connected Interpreter Sets;

Speaking: Number of the current speaking units;

Requesting: Number of the current requesting units;

Press button 1 to return Status page and press button 2 and 3 to select, press button 4 to check details of specific units.

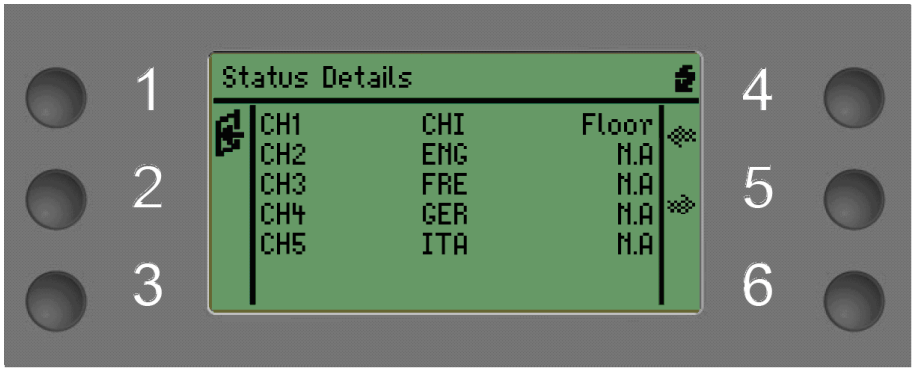
The Status Details of Total Mic as follow:



The picture above shows three connected units at the moment, each column represents the type of the unit (Chairman Unit/Delegate Unit/Interpreter Set), Mic ID/interpretation booth/position, and the status of units.

4.3.3.3 Interpretation

Press the button 4 in the Status page to access the Interpretation Status Details page.



The system above shows 5 interpretation channels, each column represents channels, languages and the channel status.

There are 4 possible channel statuses:

Floor: no interpretation is transmitting;

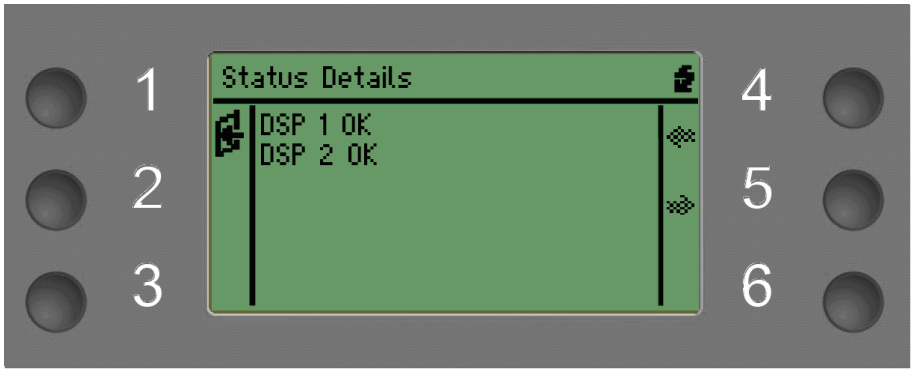
+: interpretation come from floor channel;

-: interpretation come from + interpretation channel;

N.A: this channel is not connecting to any interpreter set.

4.3.3.4 DSP

Press the button 5 in the Status page to enter the DSP Status Details page.



There are 2 DSP chips in the central controller; the page above is to indicate the operating status of the chips.

4.3.3.5 Test

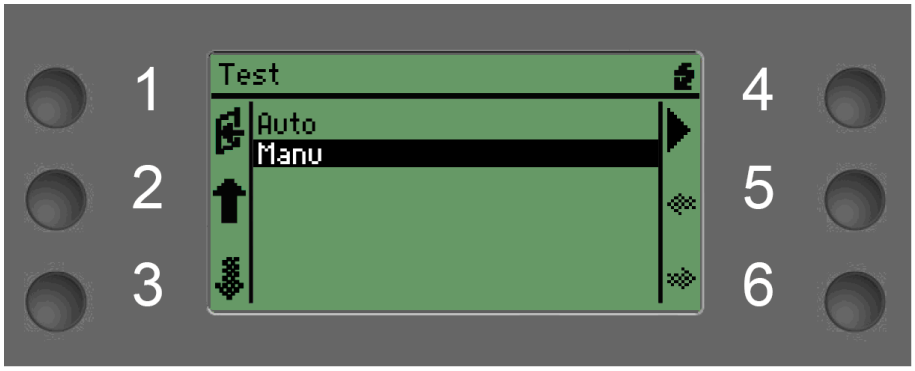
Press the button 6 of the Status page to enter the Test page.

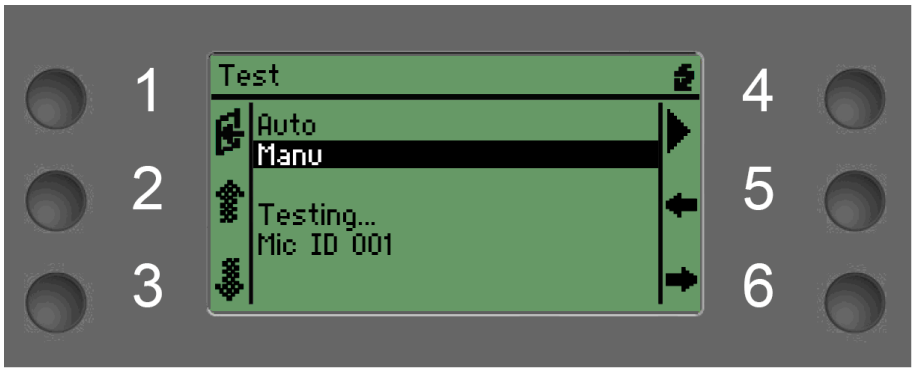
Select the testing mode by pressing the button 2 and 3, press button 4 to start/stop the test.

Two testing mode:

Auto: Cycle tests the microphones in order (start from Mic 1);

Manu: Open the minimum ID mic after starting the test program, and then press button 5 or 6 to test the previous or next mic. Press button 4 to stop the test.

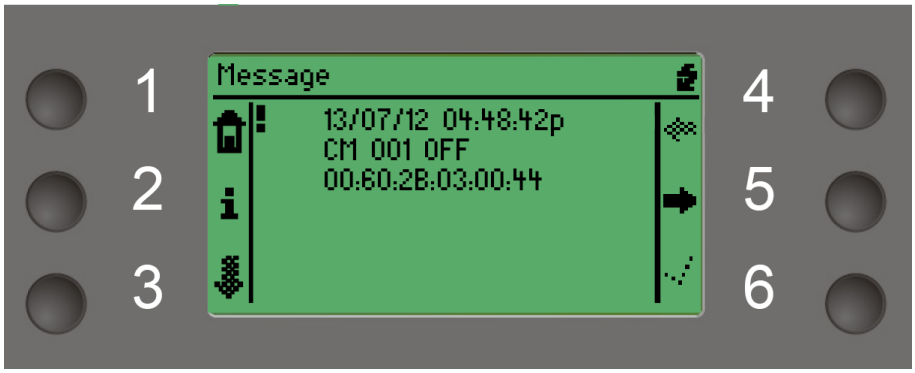




We can know whether the microphone units are operating properly by test.

4.3.4 Message

Press button 2 in the Home page to enter the Message page, you will catch the latest message as shown:



There are 2 different types of messages:

Info messages: Info messages are a series of system and operation log. Most operational events will be listed. The list holds the recent 200 events, which will be automatically cleaned up after switching off the machine.

Error messages: This type of messages may be having an effect on the system operation. And it appears if a defective component has been detected. The list holds the recent 100 entries, which are also preserved if the controller loses power.

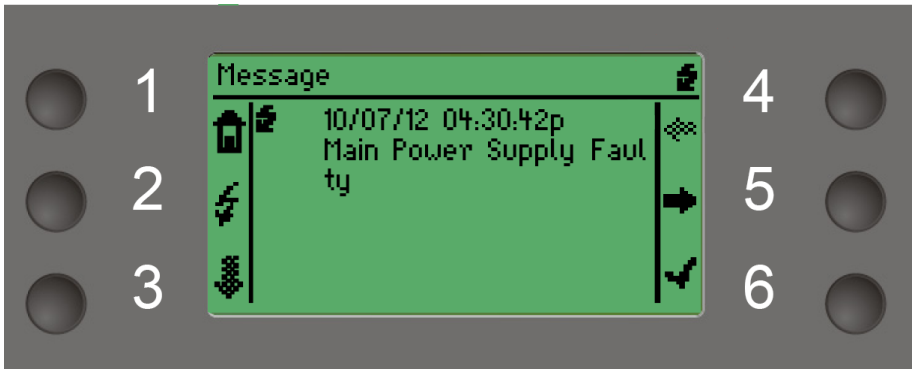
The default message of this page is info messages; you can select 2 types of messages by pressing the button 2. Info message and error message have different icon indicators.

Press button 4 and 5 to scan the previous or next message. When there is a message with multipage, press button 3 to scan the next page.

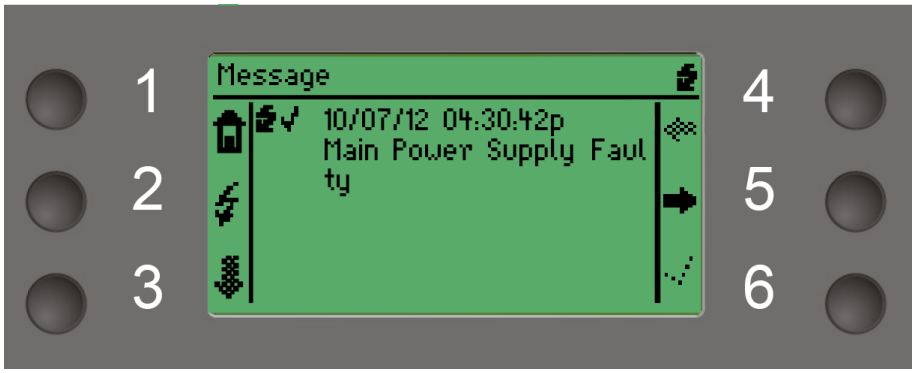
Button 6 is only effective in the error message page. It used for confirm the error massage.

You can hold the button 4 and press button 5 to jump to the last message of the list, hold the button 5 and press button 4 to jump to the first message of the list.

Error message as follow:



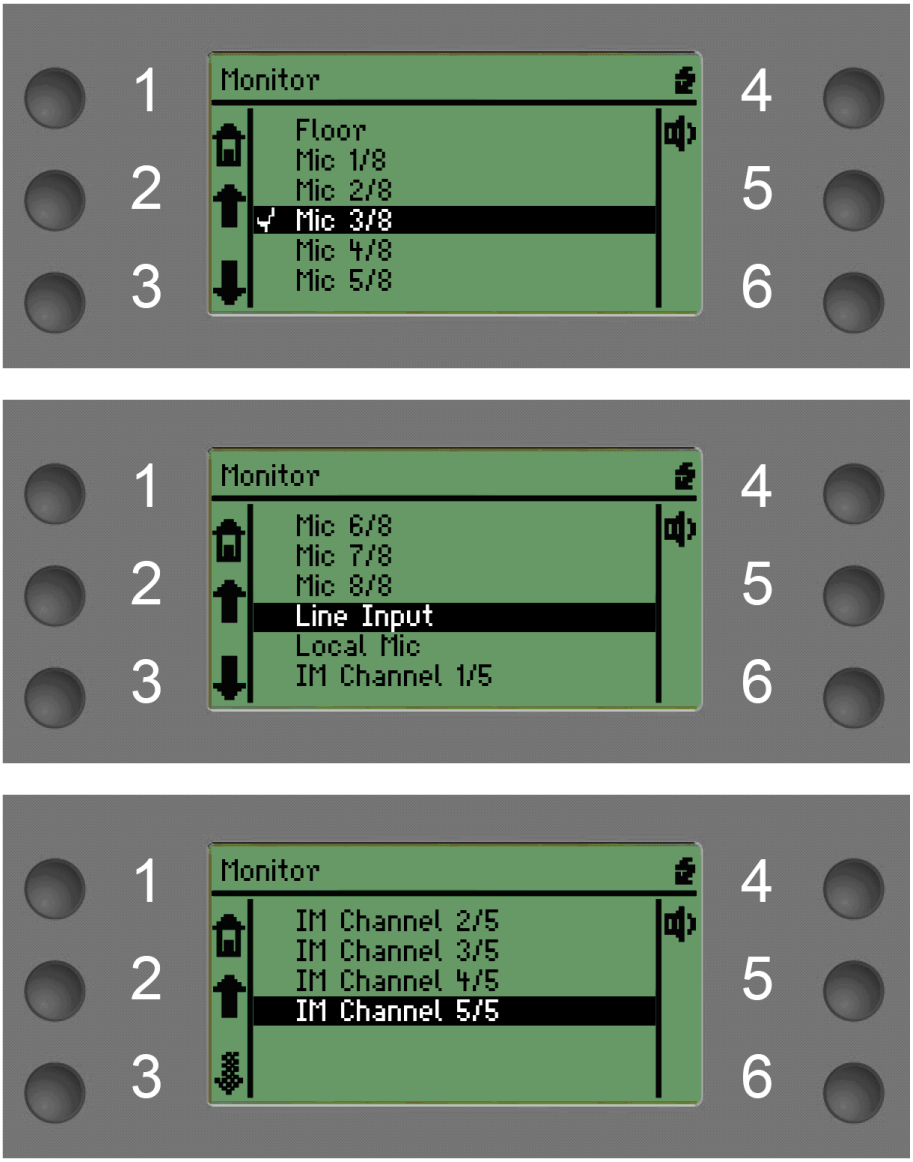
As soon as an error is detected, the Error LED will be light and cause an error message, until the error is removing, the Error LED will off. After the confirmation the screen will show as follow:



If you just confirm the message but the error still exists, then system will generate a same error message as the one you just confirmed.

4.3.5 Monitor

After pressing the button 3 in Home page, the Monitor page opens:



Description:

Floor: represents the mixer channels of 8 microphones;

Mic1~8: 8 microphones in the order in which they are opened;

Line Input: the line input connector of the rear panel;

Local Mic: the local mic input connector of the rear panel;

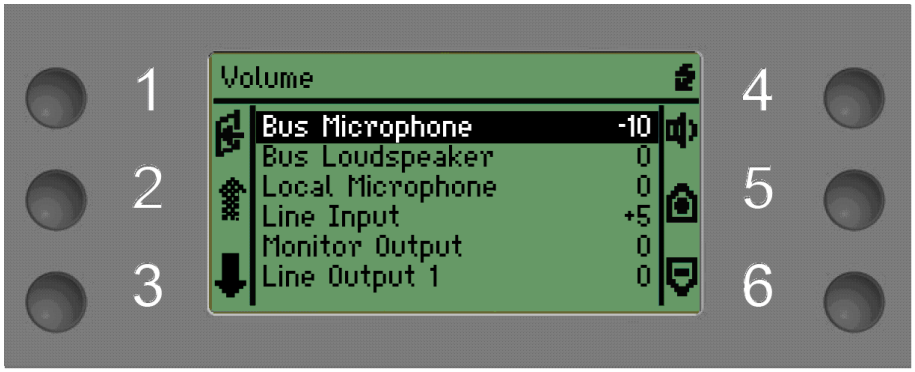
IM Channel1~5: 5 channels configured on the central controller.

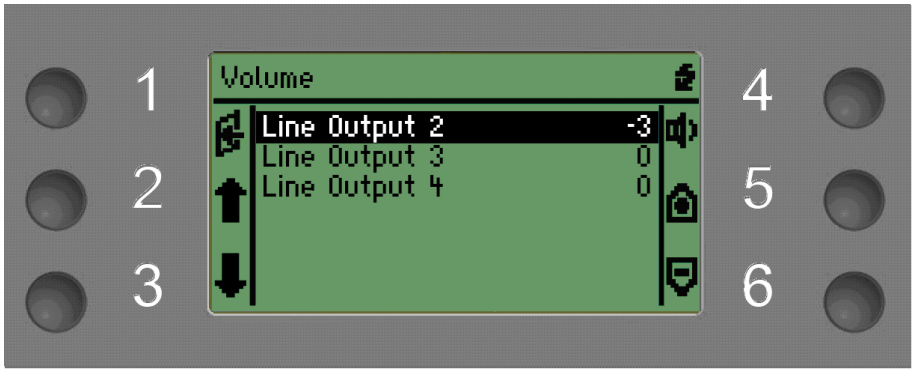
Press the button 2 and 3 to select and press the button 4 to select the monitor channel.

The Volume can be adjusted in the volume page.

4.3.6 Volume

Press button 4 in the Home page to enter Volume page.





Volume adjustment:

Bus Microphone: adjust the volume of connected microphone units and interpreter sets;

Bus Loudspeaker: adjust the volume of connected microphone units' loudspeaker;

Local Microphone: adjust the volume of local microphone;

Line Input: adjust the volume of line Input;

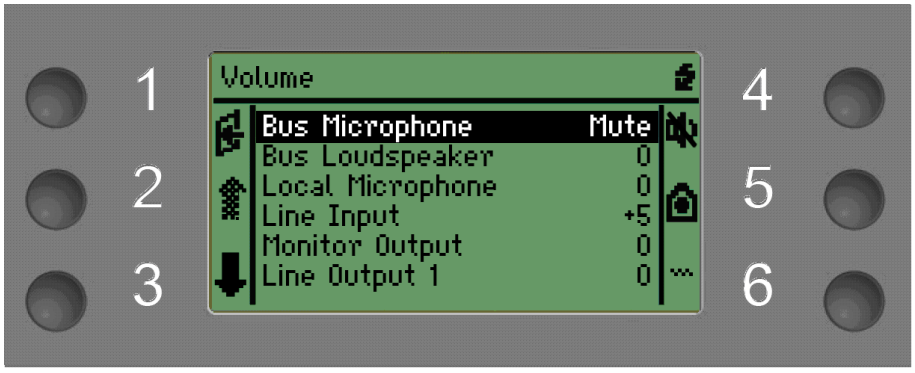
Monitor Output: adjust the output volume of monitor;

Line Output1~4: adjust the volume of line output 1 to 4.

Press the button 2 and 3 to select; button 4 is the shortcut button of mute. Button 5 and 6 are used for the volume adjust.

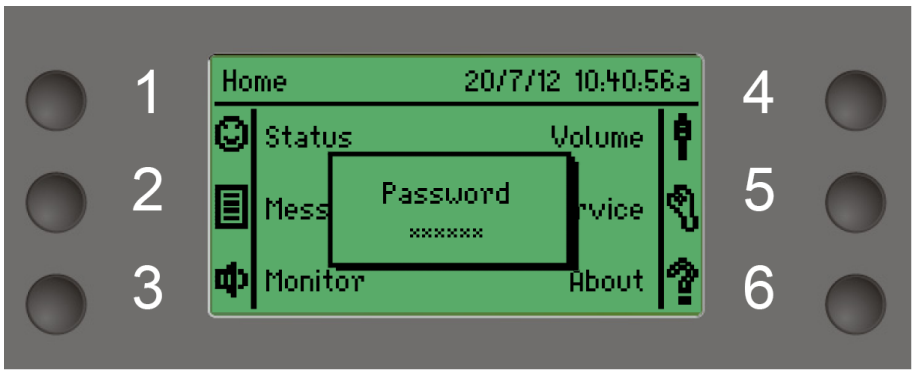
Note: The input volume adjustment range is from Mute to +24; the output volume adjustment range is from Mute to 0.

After choosing the mute button:

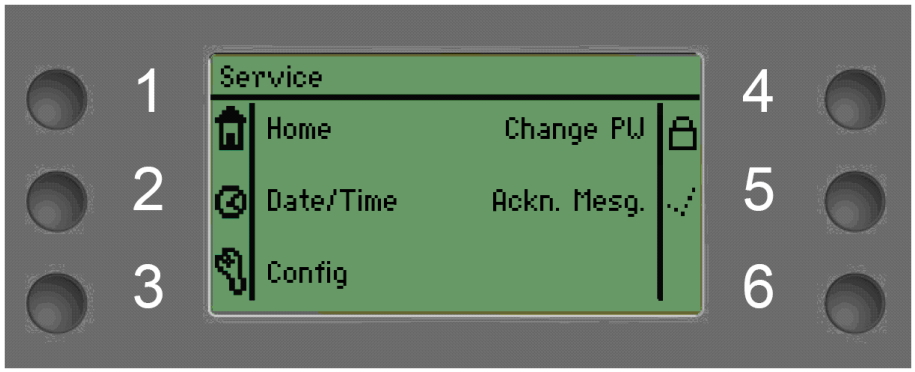


4.3.7 Service

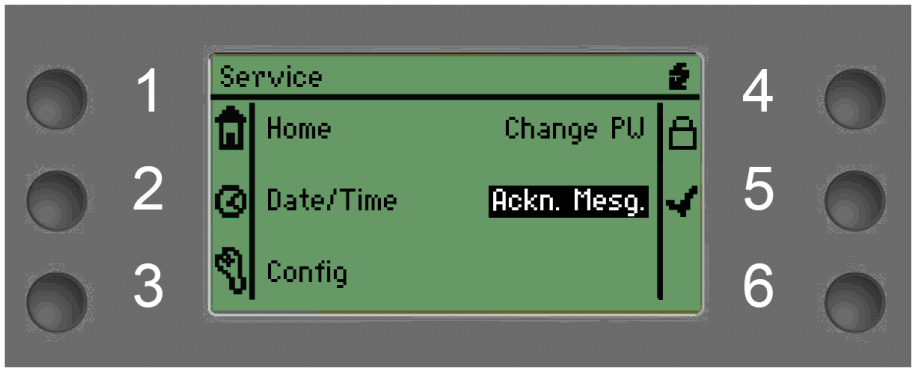
Press button 5 in the Home page will enter Service page. There are some important configuration operations, so it needs to enter the password (default password: 111111) before accessing to the page.



The dialog of entering the password will disappear if there are no operations within 3 seconds.

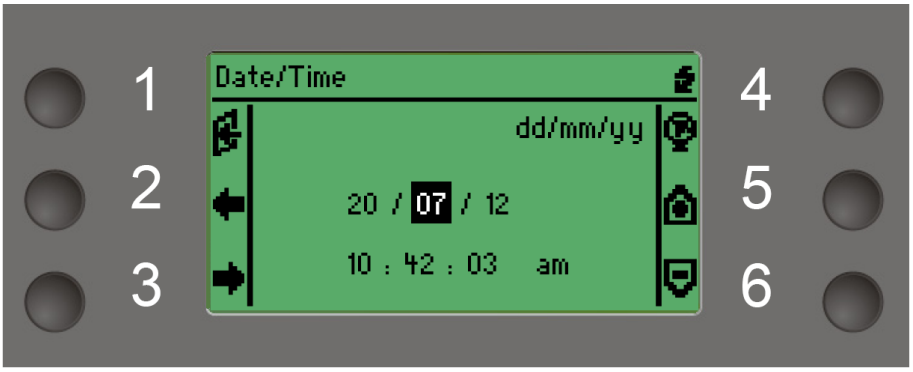


If there are unconfirmed error messages, the page will be displayed as follow.

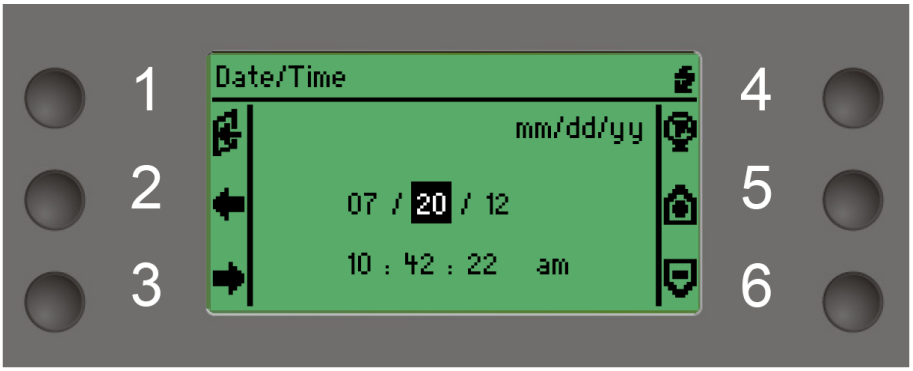


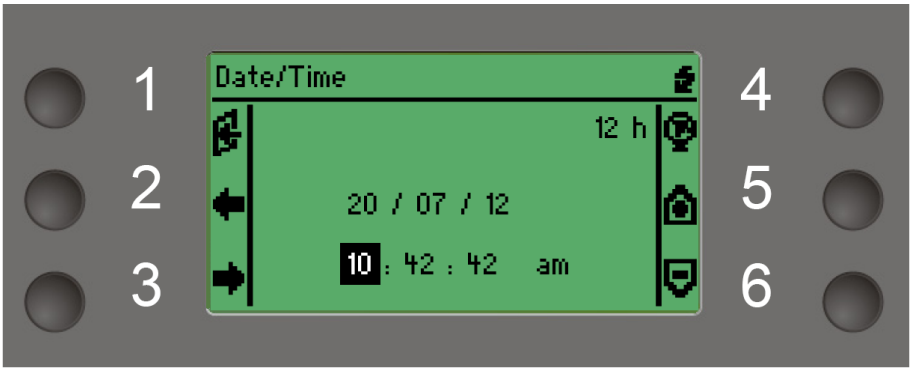
4.3.7.1 Time/Date

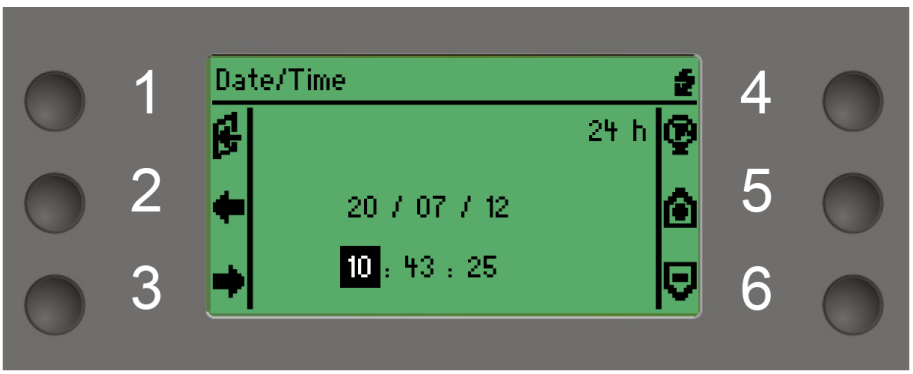
Press button 2 in the Service page to enter the Date/Time settings page:



Press the button 2 and 3 to move the highlight, press the button 4 to change the format, press the button 5 and 6 to change the number.

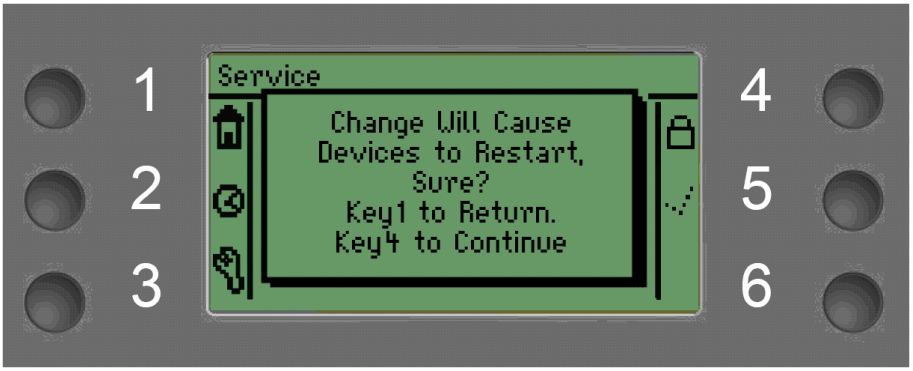




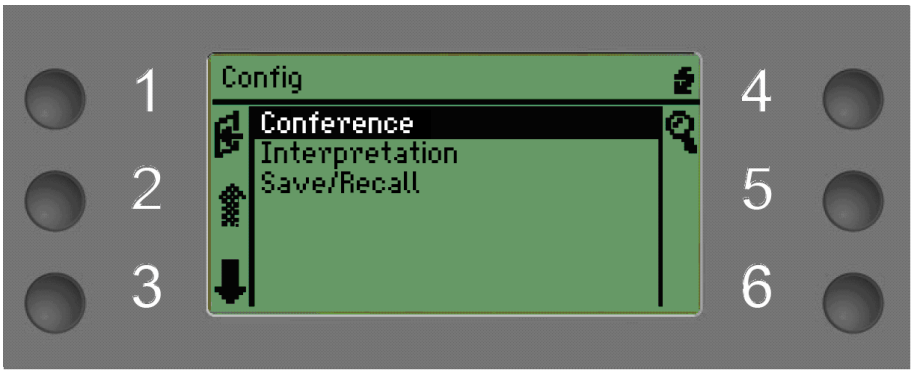


4.3.7.2 Config

Press button 3 in the Service page will enter the Config page. Changing the system config may be cause the device restart, so there will show a suggestive dialog before accessing the Config page:



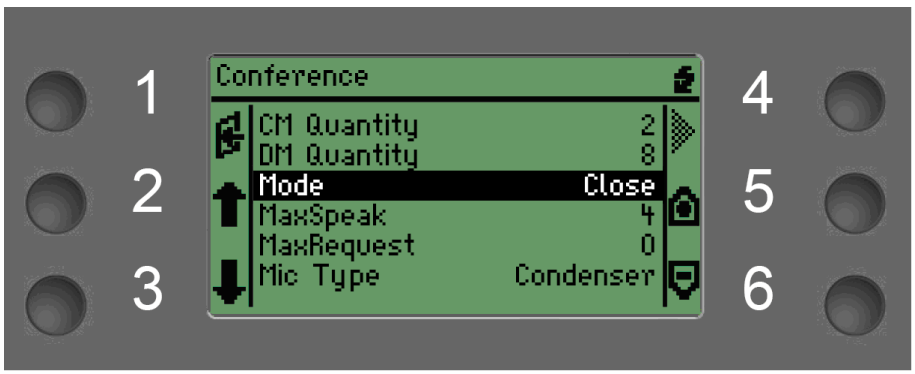
Press button 4 to enter the Config page:

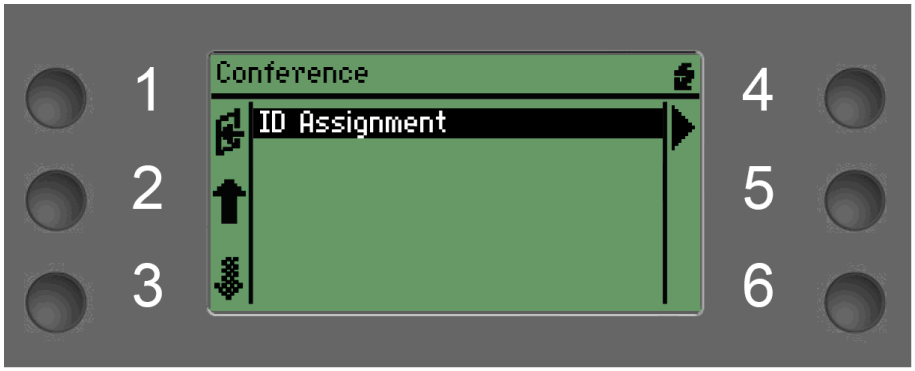


Press button 2 or button 3 to move the highlight, press button 4 to access the corresponding configuration page.

Conference (Conference configuration):

Before the conference, need configuration the conference's parameters in this page. To make sure that the system is running properly, the setting numbers of chairman unit and delegate unit has to be consistent with the actual units that connect to the controller, otherwise there will be a system error.





Description:

CM Quantity: The chairman unit quantity can be set from 1~10.

DM Quantity: The delegate quantity can be set from 0~999.

Conference Mode: Open, Close and Override.

Open: under this mode, the maximum simultaneously speaking quantities are controlled by **MaxSpeak**. When the opened microphones reach the limit, other request units will be putted in a wait sequence, their request LED (green) will be light and the green LED of the first unit on the waiting list will be flash. The maximum requesting quantities are controlled by **MaxRquest**. Chairman units are able to mute the speaking delegate microphones before they release the “Delegate Off” button on the Chairman unit provisionally.

Close: under this mode, the maximum simultaneously speaking quantities are controlled by **MaxSpeak**. When the opened microphones reach the limit, other request units can’t enter speaking or requesting. Chairman units are able to turn off the speaking delegate microphones by the “Delegate Off” button on the Chairman unit.

Override: under this mode, the maximum simultaneously speaking quantities are controlled by **MaxSpeak**. When the opened microphones reach the limit, other request units will speaking, and former speaking microphone units will be turn off. Chairman units are able to turn off the speaking delegate microphones by the “Delegate Off” button on the Chairman unit.

Note: under above three modes, Chairman Microphones always have higher priority than Delegate Microphones. The sequence of speaking and waiting is depending on the sequencing of pressing buttons.

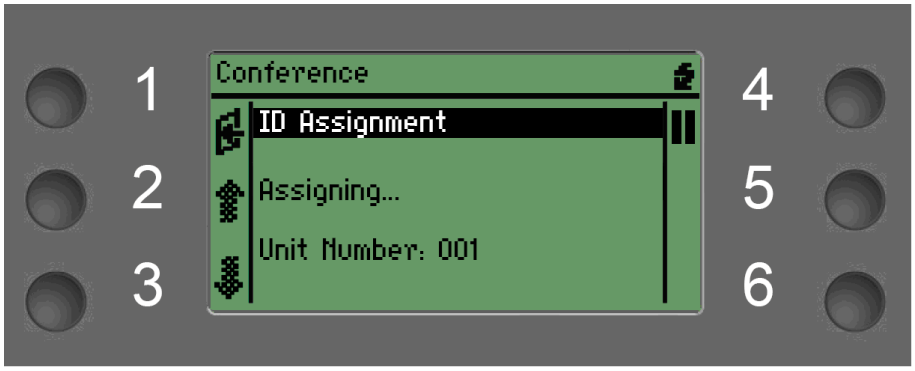
MaxSpeak: the maximum number of simultaneous speaking quantities can be selected from 0~8.

MaxRequest: the maximum number of simultaneous requesting can be selected from 0~240. The **MaxRequest** is only available in the Open Mode.

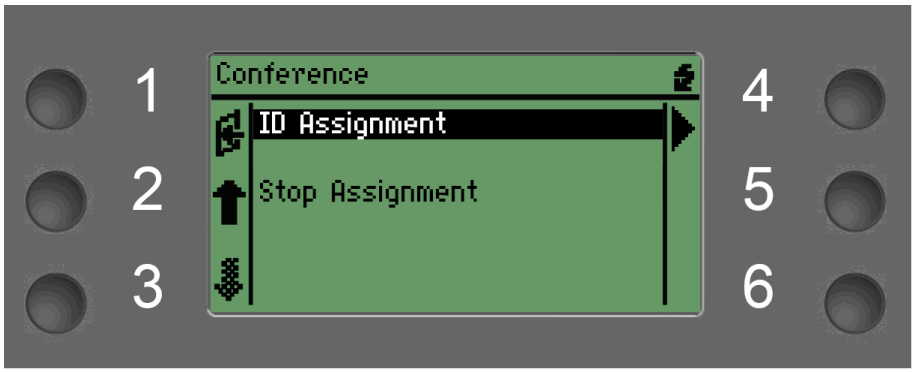
Mic Type: it can choose between Condenser and Dynamic. The Local Mic port will provide 48V phantom once selected the condenser.

ID Assignment: it is used for assigning ID number for the microphone units. Generally takes place after the system installation or the connection changed. The ID assignment function cannot be activated when the system is busying, such as someone is speaking at that time.

Press button 4 to start the ID assignment:

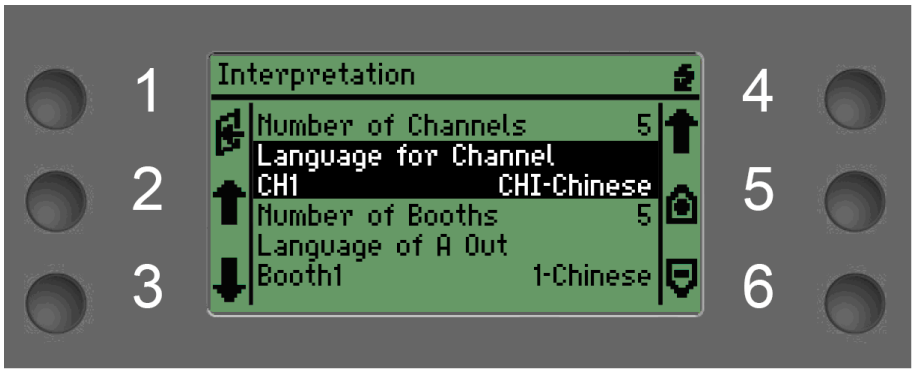


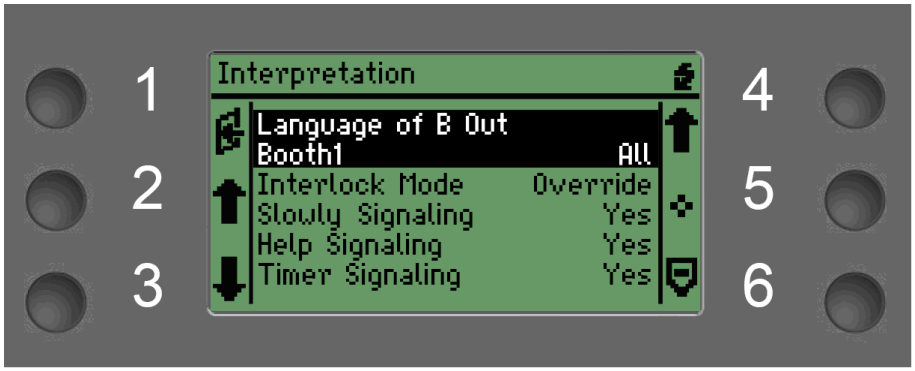
Then the request and speak LEDs of the microphones connected to the controller will be lighted. You need press the Speak LED on the microphones in order, and the ID well be assignment. While the microphone's ID assigned, the Speak LED will be off at the same time.
Every assigned microphone will appear on the controller scree.
After finishing assignment, you should press the button 4 to stop the ID assignment.

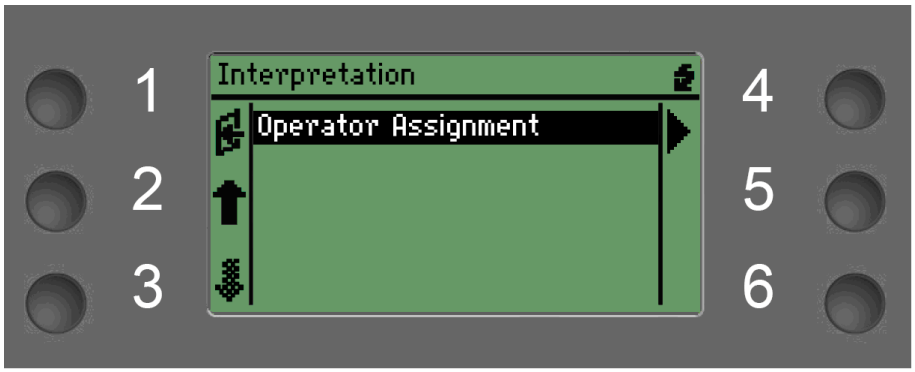


Interpretation (Interpretation configuration):

You can configure the interpretation according to the request:







Interpretation configuration contains:

(1) Total interpretation channels

(2) Mark each channel with the language abbreviation (see appendix)

(3) Set the interpretation booth number which is usually less than or equal to the total interpretation channels

(4) Assign one language for the channel A of each interpretation booth

(5) To make sure whether channel B of the interpretation booth needs the output transmission

(6) Choose Interlock or Override mode of the interpretation booth

(7) Open or close the Slowly function of the interpreter set

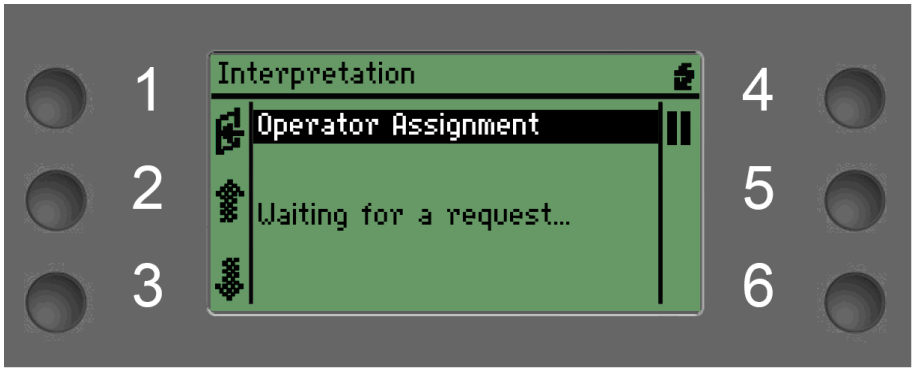
(8) Open or close the Help function of the interpreter set

(9) Open or close the Speaking Timer function of the interpreter set

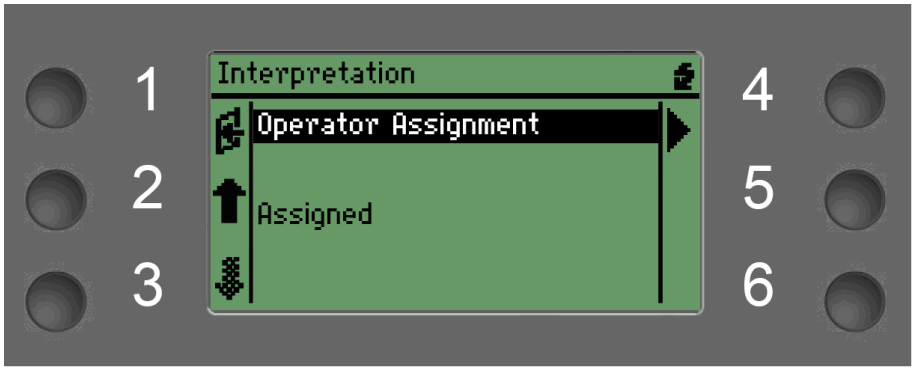
(10) To assignment the operator (There is only one operator in the whole system)

Please press button 4 to change the channel or booth number while setting (2), (4), (5).

Press the button 4 to start the operator assignment, when there are speaking units, cannot assignment operator:



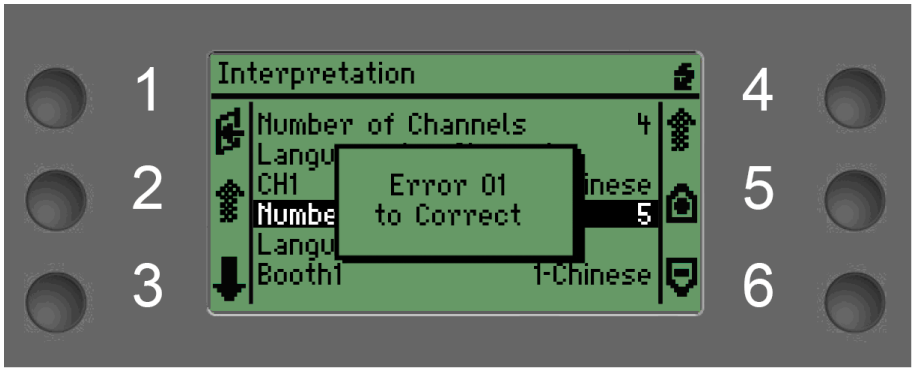
Then the Micro LED of the interpreter sets that connected to the controller will be lighted. You need press the Micro button of the interpreter set that you want to be operator, and then the Micro LED is off, it means that the operator assignment is completed.



Note: There will be 6 possible errors when you configured the interpretation when you leave the Interpretation page:

01: Channels are less than the booths;
02: There are still any channels have not assigned languages;
03: There are still any A output channels have not assigned languages;
04: Repeated languages in the channels' language;
05: Repeated languages in the A output channels;
06: The configured channel language does not exist in the current language list.

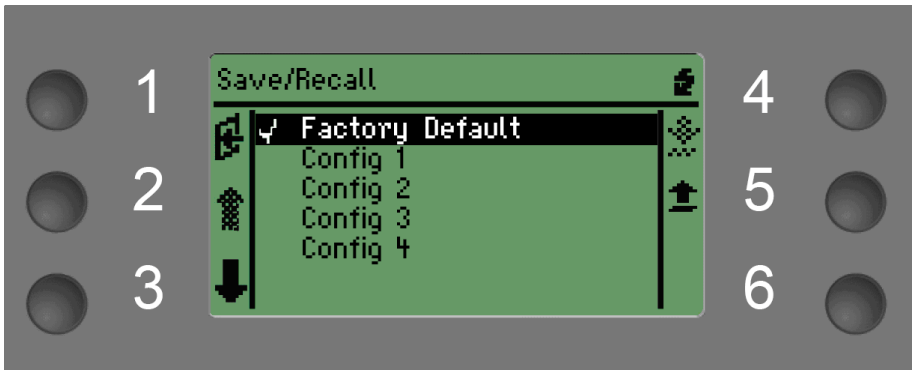
Press any buttons or 3 seconds later, the error dialog will disappear, and the highlight will jump to the wrong configuration. You can't leave the Interpretation page unless all the problems are resolved:

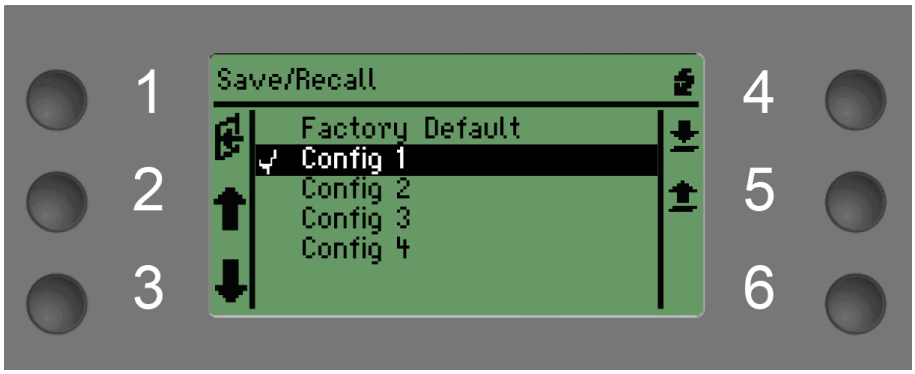


Save/Recall (Save/Recall the configuration):

The system provides 5 configuration files. The Factory Default cannot be changed. The other four configurations can be arbitrarily changed, saved and recalled.

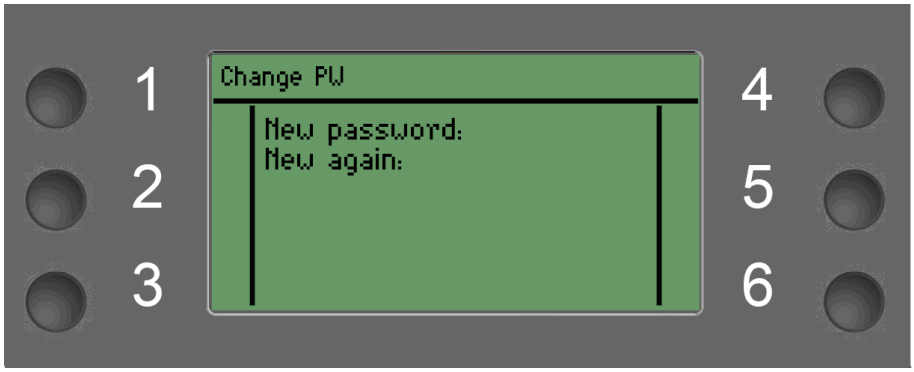
Press button 2 and 3 to select and press the button 4 to save the configuration and apply to the system, button 5 is to recall the configuration and apply to the system. The display will show as follow:



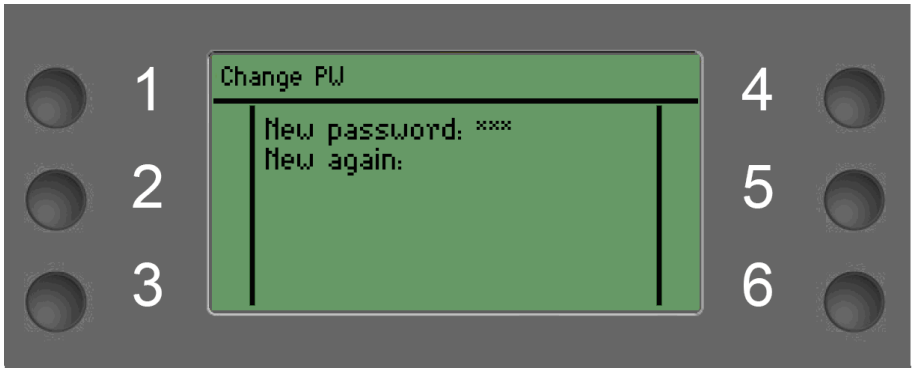


4.3.7.3 Change PW

Press button 4 in the Service page will enter the Change PW page.



The password can be set as any combination of 6 buttons, after changed, you should remember the password.



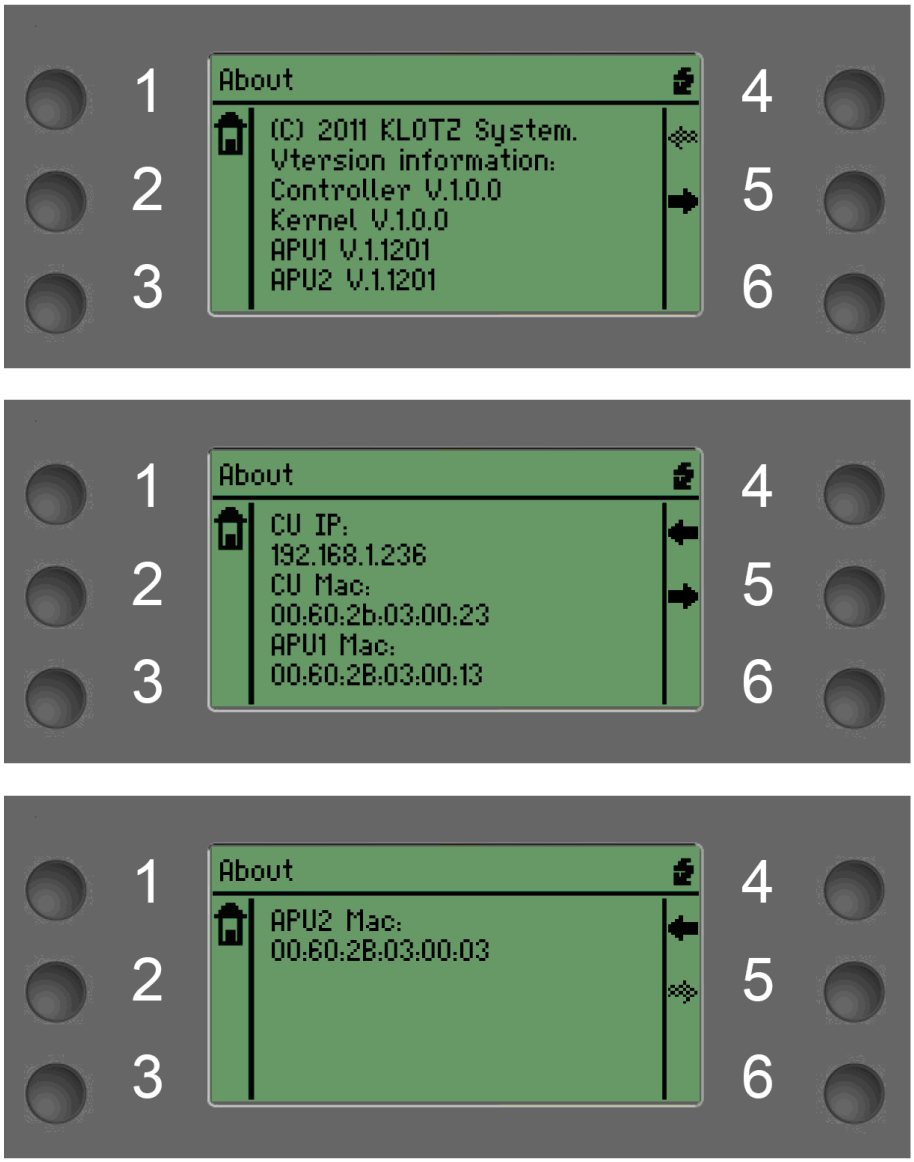
You can't leave the Change PW page if you entered a different password.

4.3.7.4 Ackn. Mesg.

Ackn.Mesg. does not have any subdirectory which is able to confirm all the error messages that the error removed at once.

4.3.8 About

Press button 6 in the Home page to enter the About Page which contains the software information, versions, IP and MAC address etc.



5 VZ 8110CM/8120DM Portable Units

With legible LCD display, portable units are also equipped with internal loudspeaker. This loudspeaker will be automatically muted while the unit is speaking. This discussion unit will be a complete conference unit as long as a gooseneck microphone is connected to it.
Each unit has 2 meters CAT5 cable to do the daisy chain connection.

5.1 VZ 8120DM Delegate Microphone Features

- Full digital portable conference unit
- Built-in audio processing chip, can adjust the audio parameters of each microphone unit independently
- Using high-grade surface treatment of the metal casing, soft and delicate feel
- Allow participators to speak or monitor conference
- Legible LCD display
- Bright LED indicates request or speaking status
- Automatic speech timer
- Calendar display
- Built-in 24 channels interpretation channel selector
- Integrated high-fidelity monitor loudspeaker
- Daisy chain connection with standard CAT5
- High-quality microphone socket, to ensure perfect tone quality
- Optional multiple gooseneck microphone
- Standard 3.5mm audio output interface, optional recording or earphone
- Ingeniously designed buckle device to ensure the stability and convenience of connection

5.2 VZ 8110CM Chairman Microphone Features

- All features of delegate microphone
- Management conference
- Priority of Chairman Microphone
- Switching off or muting (in Open mode) all active delegate microphones
- System supports connect up to 10 chairman microphones

5.3 Schematic Diagram

1. Gooseneck microphone socket
2. LC Display: shows the configuration, menu, calendar, speech timer and working status.
3. Tow RJ45 connecters: connect the Bus of conference system.
4. Monitor loudspeaker
5. Earphone socket
6. ▼/vol-: for configuration and decreasing earphone volume.
7. ▲/vol+: for configuration and increasing earphone volume.
8. ►/ch-: for configuration and decreasing earphone translation channel.
9. ◄/ch+: for configuration and increasing earphone translation channel.
10. menu: for enter menu page.
11. speak: apply for speaking.
12. Speaking LED indicator ring
13. Requesting LED indicator ring
14. delegate off: for chairman unit off or mute speaking delegate unit.

5.4 User Interface Operating Instructions

5.4.1 Start

When the microphone unit connected to the central unit, and power on the central unit, the microphone starts.

The LCD shows as follow:

ID: Microphone ID number, the current displayed ID number is 001. In the same system, each microphone unit has a unique ID number that can be modified in the setup mode. When the microphone ID is set incorrectly, the digital position is displayed as "Err", indicating that the microphone is out of work.

CM: Microphone role shows that the current role is CM (chairman) and the delegate unit is DM. It can be modified in setup mode.

CH: The channel number of listening. The current listening channel number is 0. It can be adjusted by the ch+/- button. The range of channels that can be heard is related to the simultaneous interpretation settings of the system.

VOL: Earphone volume. This is 11. It can be adjusted from 0 to 15 by the vol+/- button.

: Clock icon, followed by the current clock.

: The speaking state icon, followed by the speaking timer. The icon indicates that the current microphone is off. When the microphone is turned on, the icon is displayed and the timer starts running.

MICRO OFF: The microphone is in working status and is currently off. When the Speak button is pressed, the microphone is turned on and appeared as MICRO ON.

5.4.2 Configuration

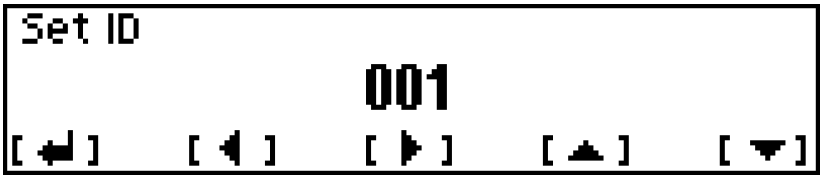
In the normal work interface, long press "menu" button, enter the setup mode after correctly input user password. The default password is "11112345", 5 setting buttons from left to right in turn indicate 1,2,3,4,5.

The first page of the setup mode is a small tip, as follows.

In the setup mode, you can forward page up and down by ◀ or ▶(button 2/3) and adjust the value of the selected item by ▲ or ▼ (button 4/5).You can set the ID number, role, LCD contrast, backlight hold time, and view the version information in turn. Press the menu (button 1) to exit the setting, and the settings are saved after exit.

5.4.2.1 Set ID

In this screen you can set the microphone ID. ID can be adjusted between 1 ~ 250. The ID of each microphone is unique in the system and should not be changed arbitrarily in the application. Incorrect settings may prevent the microphone from being used.



5.4.2.2 Set Role

In this interface you can set the role of the microphone unit. Roles can be selected between "Chairman" and "Delegate". The total number of chairman units and the number of delegate units should match the user's settings on the host and should not be changed in the application freely.

5.4.2.3 Set LCD Contrast

LCD contrast can be adjusted between 0 ~ 63, the factory value is 26.

5.4.2.4 Set LCD Backlight Hold Time

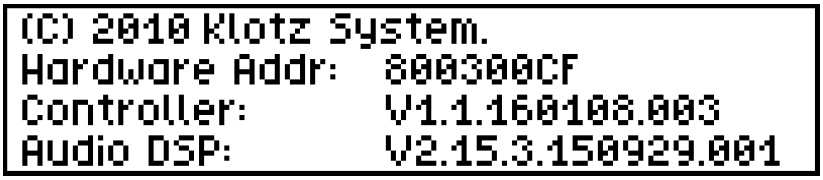
LCD backlight hold time can be adjusted from 3 to 30 (seconds), the factory value is 6.

5.4.2.5 Set Mic Auto-Close Time

After the speaker turn on the microphone, if the speaker does not speak, the microphone will not detect the speaker's voice, and the microphone will be automatically turned off after a certain time (MICRO OFF). Here is to set whether to turn on this function, if you turn on this function, you can set the microphone to be automatically turned off before the duration of the silent detection.
The value of 0 turns this function off, and turns it on when it is not 0. Factory default is 90 (seconds) and can be adjusted between 30 ~ 180.

5.4.2.6 Version Informations

View the hardware information of the microphone unit, and control firmware and DSP firmware version information.



5.5 Installation

Microphone units can be connected to any bus port of VZ 8100CU by CAT5 easily. Each bus can directly connect up to 16 microphones and one central controller can directly connect 128 microphones.

Note:
No single extension cable must exceed a length of 100m. If the distance between the microphone units and the controller is over 100m, the power injector or power distributor can be used.

6 VZ 8111CM/8121DM Portable Microphone Units with Voting

The portable microphones with voting function are equipped with legible LCD display and internal loudspeaker. This loudspeaker will be automatically muted while the unit is speaking. This discussion unit will be a complete conference unit as long as a gooseneck microphone is connected to it.
Each unit has 2 meters CAT5 cable to do the daisy chain connection.

6.1 VZ 8121DM Delegate Microphone Features

- Full digital portable conference unit
- Built-in audio processing chip, can adjust the audio parameters of each microphone unit independently
- Using high-grade surface treatment of the metal casing, soft and delicate feel
- Allow participators to speak or monitor conference
- Support sign in, voting, electing and scoring functions
- Legible LCD display
- Bright LED indicates request or speaking status
- Automatic speech timer
- Calendar display
- Built-in 24 channels interpretation channel selector
- Integrated high-fidelity monitor loudspeaker
- Daisy chain connection with standard CAT5
- High-quality microphone socket, to ensure perfect tone quality
- Optional multiple gooseneck microphone
- Standard 3.5mm audio output interface, optional recording or earphone
- Ingeniously designed buckle device to ensure the stability and convenience of connection

6.2 VZ 8111CM Chairman Microphone Features

- All features of delegate microphone
- Management conference
- Priority of Chairman Microphone
- Switching off or muting (in Open mode) all active delegate microphones
- System supports connect up to 10 chairman microphones

6.3 Schematic Diagram

1. Gooseneck microphone socket
2. IC card slot
3. LC Display: shows the configuration, menu, calendar, speech timer and working status.
4. Tow RJ45 connecters: connect the Bus of conference system.
5. Monitor loudspeaker
6. Earphone socket
7. ▼/vol-: for decreasing earphone volume.
   sign: Sign in button, for the sign in process
   5: candidate 5, for the electoral process.
8. ▲/vol+: for increasing earphone volume.
   4: candidate 4, for the electoral process.
9. ►/ch-: for translation channel decrease.
   abstain: Abstaining, for the voting process.
   3: candidate 3, for the electoral process.
10. ◄/ch+: for translation channel increase.
    no: Against, for the voting process.
    2: candidate 2, for the electoral process.
11. menu: for entering the microphone setup menu.
    yes: Agree, for the voting process.
    1: candidate 1, for the voting process.
12. speak: apply for speaking button.
13. Speaking LED indicator ring
14. Requesting LED indicator ring
15. delegate off: for chairman unit off or mute speaking delegate unit.

6.4 User Interface Operating Instructions

6.4.1 Configuration

The starting work interface and setting menu of microphone unit VZ 8111CM/8121DM portable microphone with voting function are exactly the same as microphone unit VZ 8110CM / 8120DM without voting function, so no more repeating them here.

6.4.2 Sign-in, Voting, Electing and Scoring

The functions of sign-in, voting, electing, scoring and other conference processing needs to be completed under the conference management software. In the software it's necessary to initialize the information of the meeting, preset the vote, election or appraisal proposal which required by the meeting, after the conference is started, the preset process is started from the software side at the appropriate time. The participant participates in the conference process by means of a voter or a microphone unit with voting function.

6.4.2.1 Sign in

Before participating in the voting, electing or scoring, participants should first complete the sign-in procedure in this microphone unit, otherwise the unit can't vote. The system supports two modes of sign in: sign in by keys and sign in by IC cards, the sign-in mode is set by the conference software.

If the conference software is set to use the mode of sign in by keys, after the software starts to sign in, the unit displays as follows,

Press key sign, and then sign in successfully.

If the conference software is set to use the IC cards sign in mode, after the software starts to sign in, the unit displays as follows.

Insert the IC card in the correct direction to complete the sign in.

6.4.2.2 Voting

Set the voting proposal by software and start voting, the LCD shows as follow:

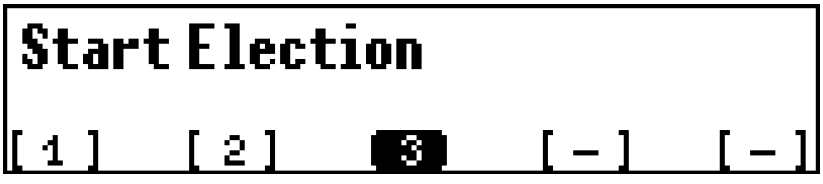
Participants according to their wishes, by 1, 2 or 3 button (Yes, No, Abstention) to vote, the LCD shows as follow after voting completed:

When voting, conference software can be set to vote by the first key effective or last key effective and will be prompted by the host. If the first key is valid, the microphone display can only respond to first press of the participant. If the last key is valid, the microphone display can respond to the changes made by the participant. The selection will remain on the interface until the host-controlled voting process ends and the microphone exits the voting interface.

6.4.2.3 Electing

The system supports four electoral modes, selecting one in three, three in three, one in five and five in five. Also it needs to select the topics, models and candidates list in advance through the conference software. If the election mode is one in three elections, after the conference software starting the election, the microphone appears as follows:

The participant can press 1, 2 or 3 button (candidates 1, 2 or 3) according to their wishes. If the user selects 3, the LCD shows as follows:



Start one in five electing, the LCD shows as follow:

The participant can press 1, 2, 3, 4 or 5 button (candidates 1, 2, 3, 4 or 5) according to their own wishes. If the user selects 5, the LCD shows as follow:

The user can modify the selection several times before the election is over. End of the election, the microphone exit the election interface, restore to starting the main interface. The display and operation of the other election modes are similar to those described above and will not be repeated.

6.4.2.4 Scoring

Set the scoring proposal by software and start scoring, the LCD shows as follow:

Participants according to their wishes, by 1, 2, 3, 4, or 5 button (score 0, 25, 50, 75 and 100) to scoring, LCD shows as follow after scoring completed:

When the voting proposal finished, the microphone will return normal working interface.

6.5 Installation

Microphone units can be connected to any bus port of VZ 8100CU by CAT5 easily. Each bus can directly connect up to 16 microphones and one central controller can directly connect 128 microphones.

Note:

No single extension cable must exceed a length of 100m. If the distance between the microphone units and the controller is over 100m, the power injector or power distributor can be used.

7 VZ 8210CM/8220DM Flush Mount Units

VZ 8000 system has Flush Mount microphone units, which is equipped with the LCD display and flush panel. Flush Mount microphone units have the same functions as portable microphone units. This discussion unit will be a complete conference unit as long as a gooseneck microphone is connected to it.

7.1 VZ 8220DM Delegate Flush Mount Unit Features

- Full digital flush mount conference unit
- Built-in audio processing chip, can adjust the audio parameters of each microphone unit independently
- Full metal shell, high-grade wired drawing surface treatment
- Allow participators to speak or monitor conference
- Legible segment LCD display
- Bright LED indicates request or speaking status
- Automatic speech timer
- Calendar display
- Built-in 24 channels interpretation channel selector
- Daisy chain connection with standard CAT5
- High-quality microphone socket, to ensure perfect tone quality
- Optional multiple gooseneck microphone
- Standard 3.5mm audio output interface, optional recording or earphone
- Ingeniously designed buckle device to ensure the stability and convenience of connection

7.2 VZ 8210CM Chairman Flush Mount Unit Features

- All features of delegate microphone
- Management conference
- Priority of Chairman Microphone
- Switching off or muting (in Open mode) all active delegate microphones
- System supports connect up to 10 chairman microphones

7.3 Schematic Diagram

1. Gooseneck microphone socket
2. Tow RJ45 connecters: connect the Bus of conference system.
3. Earphone socket
4. Channel▲: translation channel increase.
5. Channel▼: translation channel decrease.
6. Segment LCD: shows the configuration, calendar, speech timer and working status.
7. Volume▼: earphone volume decrease.
8. Volume▲: earphone volume increase.
9. Speak: apply for speaking.
10. Speaking LED indicator
11. Requesting LED indicator
12. Delegate off: for chairman unit off or mute speaking delegate unit.

7.4 User Interface Operating Instructions

7.4.1 Start

When the microphone unit connected to the central unit, and power on the central unit, the microphone starts.

The LCD shows as follow:

CM 020: Microphone role and ID number.

SU ~ SA: Week.

15-03-03: Calendar.

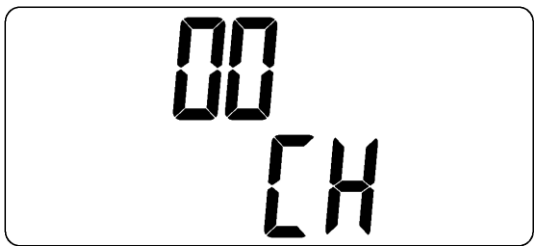
MIC OFF: Microphone operating status, off at startup. When the microphone is turned on, the display shows MIC ON.

14:45:08: the current clock, when opening the microphone to speak, shows the speech time.

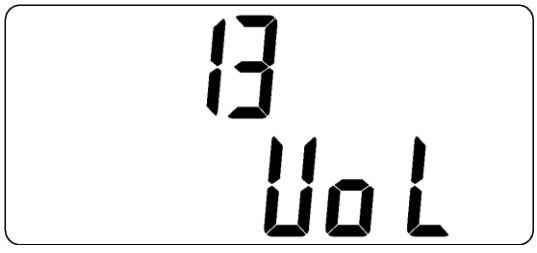
Press the Speak button, the microphone is turned on, as follows:

7.4.2 Channel and Volume Set

To view or adjust the channels that the headset is listening to via the two Volume buttons, the display shows as follows:

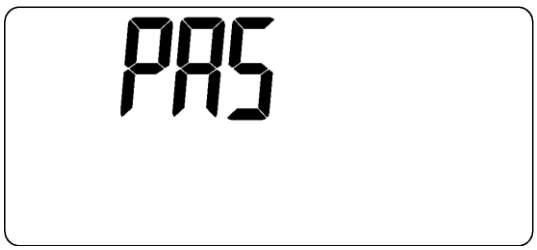


To view or adjust the volume of the headset via the two Volume buttons, the display shows as follows:



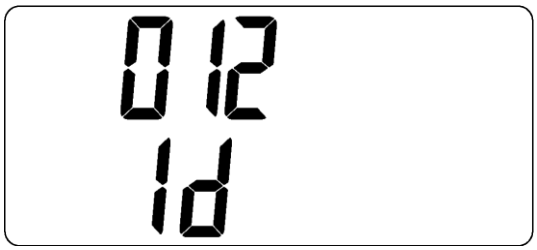
7.4.3 Configuration

In normal working interface, press volume ▲ button and hole on about 3 seconds will enter setup mode, before enter microphone setup mode, you should enter password to prevent malicious modifications. The default password is volume button "▲▲▼▲▲▼", shows as follow:



7.4.3.1 Set ID Number

Enter set ID number page after entering the correct password. Use the volume adjustment plus or minus button to adjust the ID number, and use the channel selection plus or minus button to scroll back and forth. The microphone ID can be set between 1 and 250, and each microphone ID is unique in the system. The user should not change the microphone ID in the application. Incorrect settings may prevent the microphone from being used.



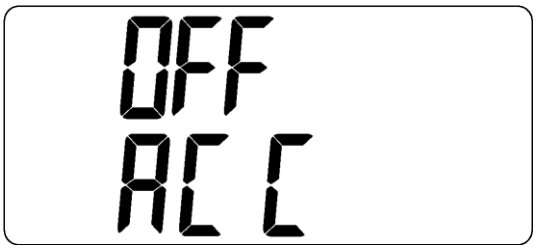
7.4.3.2 Set Role

In this interface, you can set the role of the microphone unit (ROLE). Roles can be selected between "CM (Chairman)" and "DM (Delegate)". The total number of chairman units or the number of representative units should conform to the user's settings on the host and should not be changed in the application.

7.4.3.3 Set Mic Auto-Close Time

When the speaker turns on the microphone (MICRO ON), the microphone will not detect the speaker's voice if he doesn't speak, the microphone will be turned off automatically after a certain time (MICRO OFF). This is to set whether to turn on the auto-close control function (ACC). If this function is turned on, you can set the duration of silence before the microphone is automatically turned off

When this value is set to 0, this function is disabled, and when it is not 0, this function is enabled. Factory default is 90 (seconds), you can adjust it from 30 to 180.



7.5 Installation

Microphone units can be connected to any bus port of VZ 8100CU by CAT5 easily. Each bus can directly connect up to 16 microphones and one central controller can directly connect 128 microphones.

Note:

No single extension cable must exceed a length of 100m. If the distance between the microphone units and the controller is over 100m, the power injector or power distributor can be used.

8 VZ 8211CM/8221DM Flush Mount Units with Voting

VZ 8000 system has flush mount microphones unit, which is equipped with LCD display and voting function. Their functions have the same as portable microphone units. This discussion unit will be a complete conference unit as long as a gooseneck microphone is connected to it.

8.1 VZ 8221DM Delegate Flush Mount Unit Features

- Full digital flush mount conference unit
- Built-in audio processing chip, can adjust the audio parameters of each microphone unit independently
- Full metal shell, high-grade wired drawing surface treatment
- Allow participators to speak or monitor conference
- Support sign in, voting, electing and scoring functions
- Legible segment LCD display
- Bright LED indicates request or speaking status
- Automatic speech timer
- Calendar display
- Built-in 24 channels interpretation channel selector
- Daisy chain connection with standard CAT5
- High-quality microphone socket, to ensure perfect tone quality
- Optional multiple gooseneck microphone
- Standard 3.5mm audio output interface, optional recording or earphone
- Ingeniously designed buckle device to ensure the stability and convenience of connection

8.2 VZ 8211CM Chairman Flush Mount Unit Features

- All features of delegate microphone
- Management conference
- Priority of Chairman Microphone
- Switching off or muting (in Open mode) all active delegate microphones
- System supports connect up to 10 chairman microphones

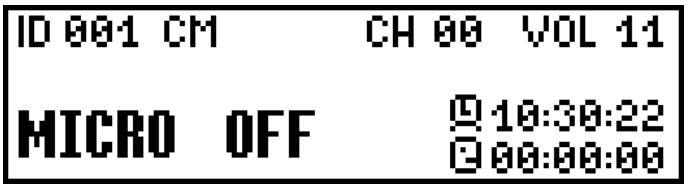
8.3 Schematic Diagram

1. Gooseneck microphone socket
2. Tow RJ45 connecters: connect the Bus of conference system.
3. Earphone socket
4. IC card slot
5. Segment LCD: shows the configuration, menu, calendar, speech timer and working status.
6. Menu: for enter menu page.
   1: candidate 1.
   0: scoring 0.
7. ◀/Yes: for configuration and consent from voting.
   2: candidate 2.
   25: scoring 25.
   Ch+: translation channel increase.
8. ▶/No: for configuration and oppose from voting.
   3: candidate 3.
   50: scoring 50.
   Ch-: translation channel decrease.
9. ▲/Abstain: for configuration and abstain from voting.
   4: candidate 4.
   75: scoring 75.
   Vol+: earphone volume increase.
10. ▼/Sign In: for configuration and sign in by button.
    5: candidate 5.
    100: scoring 100.
    Vol-: earphone volume decrease.
11. Speak: apply for speaking.
12. Speaking LED indicator
13. Requesting LED indicator
14. Delegate off: for chairman unit off or mute speaking delegate unit.

8.4 User Interface Operating Instructions

8.4.1 Start

When the microphone unit connected to the central unit, and power on the central unit, the microphone starts.



The LCD shows as follow:

ID: Microphone ID number, the current displayed ID number is 001. In the same system, each microphone unit has a unique ID number that can be modified in the setup mode. When the microphone ID is set incorrectly, the digital position is displayed as "Err", indicating that the microphone is out of work.

CM: Microphone role shows that the current role is CM (chairman) and the delegate unit is DM. It can be modified in setup mode.

CH: The channel number of listening. The current listening channel number is 0. It can be adjusted by the Ch+/- button. The range of channels that can be heard is related to the simultaneous interpretation settings of the system.

VOL: Earphone volume. This is 11. It can be adjusted from 0 to 15 by the Vol+/- button.

: Clock icon, followed by the current clock.

: The speaking state icon, followed by the speaking timer. The icon indicates that the current microphone is off. When the microphone is turned on, the icon is displayed and the timer starts running.

MICRO OFF: The microphone is in working status and is currently off. When the Speak button is pressed, the microphone is turned on and appeared as MICRO ON.

Press the Speak key and the microphone will be turned on, displays as follows:

8.4.2 Configuration

In normal working interface, long press menu button, before enter microphone setup mode, should enter password to prevent malicious modifications. The default password is “11112345”, five setting buttons indicate 1, 2, 3, 4, and 5 from left to right.

The first page of the setup mode is a small tip, as follows. You can press button ◀ or ▶ (button 2 and 3) to switch page and press button ▲ or ▼ (button 4 and 5) to adjust the settings, also you can set the ID number, role, LCD contrast, backlight hold time, and view the version in turn. Press the Menu (button 1) to exit the setting, and the settings are saved after exiting.

8.4.2.1 Set ID

In this screen you can set the microphone ID. ID can be adjusted between 1 ~ 250.The ID of each microphone is unique in the system and should not be changed arbitrarily in the application. Incorrect settings may prevent the microphone from being used.

8.4.2.2 Set Role

In this interface you can set the role of the microphone unit. Roles can be selected from "Chairman" and "Delegate". The total number of chairman units and the number of delegate units should match the user's settings on the host and should not be changed in the application.

8.4.2.3 Set LCD Contrast

LCD contrast can be adjusted between 0 ~ 63, the factory default is 26.

8.4.2.4 Set LCD Backlight Hold Time

LCD backlight hold time can be adjusted from 3 to 30 (seconds), the factory default is 6.

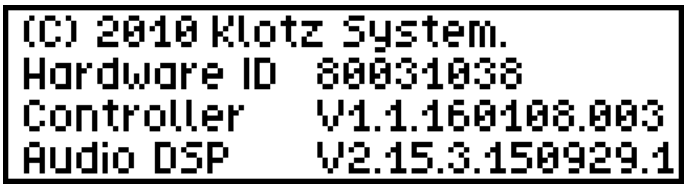
8.4.2.5 Set Mic Auto-Close Time

If the speaker does not speak, the microphone will not detect the speaker's voice, and the microphone will automatically turn off after a certain time (MICRO OFF). Here is to set whether to turn on this function, if you turn on this function, you can set the microphone to be automatically turned off before the duration of the silent detection.

A value of 0 turns this function off, and turns it on when it is nonzero. Factory default is 90 (seconds), can be adjusted between 30 ~ 180.

8.4.2.6 Version Informations

View the hardware information of the microphone unit, and control firmware and DSP firmware version information.



8.4.3 Sign-in, Vote, Electing and Scoring

The functions of sign-in, voting, electing, scoring and other conference processing needs to be completed under the conference management software. In the software it's necessary to initialize the information of the meeting, preset the vote, election or appraisal proposal which required by the meeting, after the conference is started, the preset process is started from the software side at the appropriate time. The participant participates in the conference process by means of a voter or a microphone unit with voting function.

8.4.3.1 Sign In

Before participating in the voting, electing or scoring, participants should first complete the sign-in procedure in this microphone unit, otherwise the unit can't vote. The system supports two modes of sign in: sign in by keys and sign in by IC cards, the sign-in mode is set by the conference software.
If the conference software is set to use the mode of sign in by keys, after the software starts to sign in, the unit displays as follows,

Press key sign, and then sign in successfully.

If the conference software is set to use the IC cards sign in mode, after the software starts to sign in, the unit displays as follows.

Insert the IC card in the correct direction to complete the sign in.

8.4.3.2 Voting

Set the voting proposal by software and start voting, the LCD shows as follow:

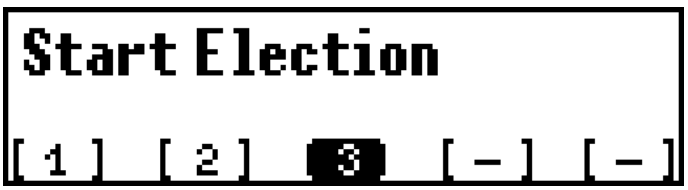
Participants according to their wishes, by 2, 3 or 4 key (Yes, No, Abstention) to vote, the LCD shows as follow after voting completed:

When voting, conference software can be set to vote by the first key effective or last key effective and will be prompted by the host. If the first key is valid, the microphone display can only respond to first press of the participant. If the last key is valid, the microphone display can respond to the changes made by the participant. The selection will remain on the interface until the host-controlled voting process ends and the microphone exits the voting interface.

8.4.3.3 Electing

This system support one in three, three in three, one in five and five in five four electing modes, set the electing proposal, mode and candidate list by software in advance, and then start one in three electing, the LCD shows as follow:

The participants can press 1, 2 or 3 button (candidates 1, 2 or 3) according to their wishes. If the user selects 3, the display shows as follows:



Start one in five electing, the LCD shows as follow:

The participant can press 1, 2, 3, 4 or 5 button (candidates 1, 2, 3, 4 or 5) according to their own wishes. If the user selects 5, the display shows as follows:

The user can modify the selection several times before the election is over. After the election being finished, the microphone exit the election interface, restore to the starting main interface. The display and operation of the other election modes are similar to those described above and will not be repeated.

8.4.3.4 Scoring

Set the scoring proposal by software and start scoring, the LCD shows as follow:

Participants according to their wishes, by 1, 2, 3, 4, or 5 button (score 0, 25, 50, 75 and 100) to scoring, LCD shows as follow after scoring completed:

When the voting proposal finished, the microphone will return normal working interface.

8.5 Installation

Microphone units can be connected to any bus port of VZ 8100CU by CAT5 easily. Each bus can directly connect up to 16 microphones and one central controller can directly connect 128 microphones.

Note:

No single extension cable must exceed a length of 100m. If the distance between the microphone units and the controller is over 100m, the power injector or power distributor can be used.

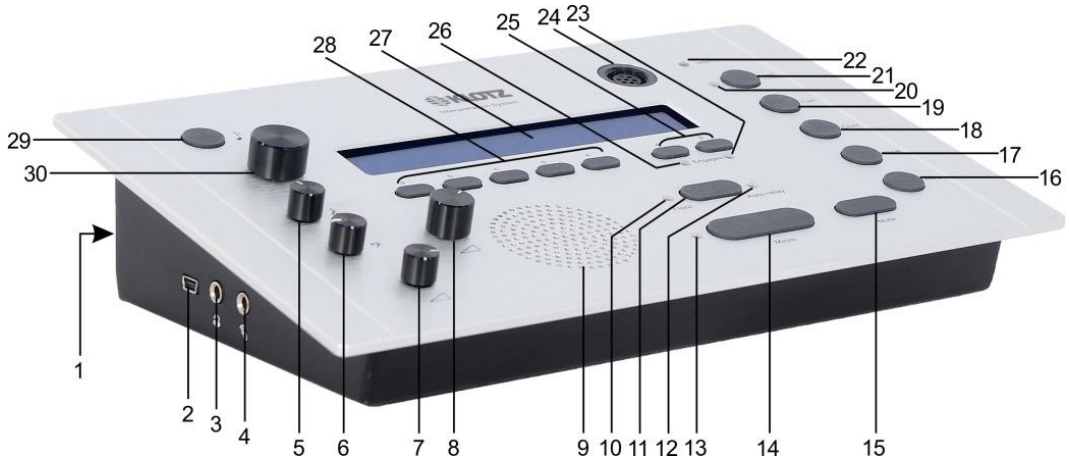
9 VZ 8310IM Interpreter Set

VZ 8310IM is the perfect solution for interpretation system with 24 channels. With the flush mount and portable installation and gooseneck microphone or headphone can consist of a complete interpretation unit.

9.1 VZ 8310IM Interpreter Set Features

- Full digital conference translation device
- Flush mount or portable interpreter set, high-grade metal surface treatment
- 24 translation channels, each translation language support 6 interpreter sets
- Legible LCD display
- 5 preselect buttons for input channels, 2 preselect buttons for output
- Built-in audio processing chip, can adjust the audio parameters of each interpreter set independently
- Headphone volume and tone adjustment function
- Integrated high-fidelity monitor loudspeaker
- Automatic interlocking
- Auto-relay function
- Bright LED indicates speaking status
- Voice reminder for blind people
- Remind the speaker to slow down
- Cough button
- Receiving messages
- Daisy chain connection with standard CAT5
- High-quality microphone socket, to ensure perfect tone quality
- Optional multiple gooseneck microphone
- Ingeniously designed buckle device to ensure the stability and convenience of connection

9.2 Schematic Diagram



1. Network: tow RJ45 connecters to connect the Bus of conference system.

2. USB socket: system update.

3. Earphone socket

4. Headset microphone socket

5. Treble adjust of earphone

6. Bass adjust of earphone

7. Volume adjust of earphone

8. Volume adjust of loudspeaker

9. Monitor loudspeaker: The loudspeaker is working only when the microphones of all the interpreter sets in the same interpreter booth are off.

10. Floor channel LED indicator

11. Switch floor channel or auto-relay button

12. Auto-relay LED indicator

13. Microphone on/off LED indicator

14. Microphone on/off button

15. Mute button: Temporarily disables the microphone, press the button and holed on the microphone mute, release the button, the microphone enable.

16. Help button: Send a help signal to the operator.

17. Slow button: Remind the speaker to slow down.

18. Intercom button (chairman): Opens an intercom channel to the chairman, press the button and hold on, call the chairman, release the button, call end. When the interpreter set receives a call, you can press the button and hold on to talkback with others, release the button, call end.

19. Intercom button (operator): Opens an intercom channel to the operator, press the button and hold on, call the operator, release the button, call end.

20. Message LED indicator: When the interpreter set receives a message, the LED will be light.

21. Check message button: Opening/closing channel overview.

Opening messages that the interpreter set received.

22. Intercom LED indicator: When the interpreter set receives an intercom call, the LED will be light.

23. B output channel engaged LED indicator

24. Gooseneck microphone socket

25. Output channel A/B button

26. An output channel engaged LED indicator

27. LC Display: Shows the configuration, menu and working status.

28. Preselect input channel a/b/c/d/e button

29. Beep button: Enables or disables the beep function, convenient for blind.

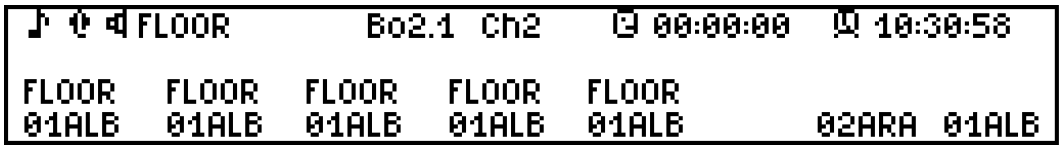
30. Primary knob: Used for system configuration and adjust loudspeaker channel

9.3 Operating Instructions

9.3.1 Starting Interface

Ensure that the interpreter station is connected to the conference host, turn on the power of the host, and the interpreter station will be started. If the translator station is not configured, it will show as follows:

If the configuration of translator station has been completed, VZ 8310IM startup interface shows as follows:



: Blind mode tone start indication. Press the button on the front panel to turn off the beep and this indication.

: Headset microphone indication. Displayed only when the headset is plugged in and only when an external microphone is plugged in, no display when an external headset isn't plugged in.

FLOOR: Monitor the speakers and their receive channels.

Bo2.1: Translator room number and seat number.

Ch2: The main output channel assigned by the system is the same as the channel displayed by "02ARA" of the output A.

: Speech instructions. When the microphone is on, the icon appears , and then the timer runs.

: Clock, followed by the real-time clock.

FLOOR
01ALB: 5 preselected listening channel number, name and sound quality. 01 is the simultaneous interpretation channel number, ALB is the abbreviation of the language name Albanian (see appendix), and FLOOR is the sound quality of the channel. Depending on the number of relay translations to the scene, there are three types of sound quality for the translation channel, FLOOR, +, and -. FLOOR is the quality of the speaking scene, + is the direct translation of FLOOR, - is the translation of + again.

After being started, the default of five preselected listening channels is 01ALB/FLOOR, the translator according to listeners' demand to change the preselection at any time to facilitate direct operation.

02ARA 01ALB : Abbreviation for the channel numbers and language names of the two preselected output channels A and B. The output channel of A is assigned by the system and can't be changed by the translator. The channel of B is operationally changeable by the translator. To use the channel preselection function of output B, the output B function of the room where the interpreter station is located must be opened in advance in the management software or the conference host.

9.3.2 Interpreter Set Configuration

In the normal work interface, press the input preselection key b and the output preselection key B at the same time, enter the interpreter station installation mode, you can set the interpreter station.

If another translator station is already in installation mode or the system is busy, it will show as follows:

Enter the configuration mode and shows as follows:

In the installation mode, the following buttons are available:

Primary knob: Changes the current setting item

Enter the Preselect button a ( ): go to the previous menu

Enter the Preselect button b ( ): go to the next menu

Enter the Preselect button d ( ): option can be change

Enter the Preselect button e ( ): confirm current selection

Enter the Preselect button B ( ): exit the installation mode

With the above operation buttons, you can set the interpreter number, interpreter seat number, internal/external microphone, B output pre-selected channel number, and auto-relay translation source interpreter room in turn.

9.3.2.1 Interpreter Room Number Set

Turn to page Item 1 and set the page for the interpreter room number. If it has never been set, it will display as follows:

Press the button d ( ), and the square brackets change to the angle brackets. By rotating the main knob, change to the interpreters' number where this unit is located. The range of options depends on the number of language channels and the number of translators set by the host or conferencing management software.

Press button e ( ), the angle brackets become square brackets, and the settings are saved.

9.3.2.2 Seat Number Set

Item 2 set the number of the unit in the interpreter room. You can select between 1 ~ 6. A translator room supports up to 6 translators to work together. The setting method is the same as setting the interpreter room number.

9.3.2.3 Microphone Select

Item 3 set which microphone is to be used. The user can manually select the headset or the local gooseneck microphone. If auto is selected, the unit automatically uses the microphone that is currently in use. If both external and local microphones are present, the external microphone is used. The set method is similar to booth number.

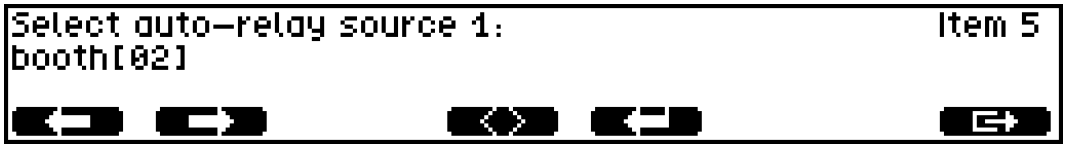
9.3.2.4 B Output Channel Number Set

Item 4 sets the number of pre-selected channels for output B, you can select either 1 channel or 2 channels.

Note: If the host unit does not enable the B output, it can't be set here (the host can enable or disable the B output function). When B output is set to be 2 preselected channels, press B key to switch between B1 and B2 in the main work interface.

9.3.2.5 Auto-relay Translation Source Interpreter Room Set

Item 5/6/7 page set the auto-relay translator source translator room separately. Support for selecting up to 3 auto-relay translation source rooms. If there is a microphone turned on, the listening of the local headset will automatically switch to the translation channel of the room, and the panel will indicate to listen to the auto-relay, whereby the translator will listen for translation. This pre-set translation source, the interpreter set automatically switch to the source to listen to when the translation source has the output, the translator accordingly translation mechanism, called auto-relay translation. If you do not need auto-translation, you can ignore this setting.



9.3.2.6 Exit

This page prompts the setting is completed, you can press B to exit the installation mode. You can also press the page key to return to the setup item.

9.3.3 Operating Interpreter Set

9.3.3.1 Assign a Channel to the Input Preselected Button

1. Press and hold an input preselection button,
2. Turn the main knob to the desired channel,
3. Release the Preselect button.

The selected channel is assigned to this input preselection button.

9.3.3.2 Assign a Channel to the B Output Button

When the B output is displayed, the B output is available and the B output button can be assigned to a channel.

1. Hold down the B output preselect button,
2. Turn the main knob to select the channel,
3. Release the B output button to assign the selected channel.
4. If the B key is assigned two preselected channels, switch the channel and set the other.

9.3.3.3 Switch the Two Preselected Channels of the B Output Button

The interpreter setup mode allows you to set 1 or 2 preselected channels for the B output button. When the B output is set to two channels, presses B button longer after release, you can switch B1 and B2 of the preselected channel.

9.3.3.4 Test the Microphone or Headphones

1. Set the channel for one of the preselected buttons to be the same as the A output.
2. Press this input preselection button.
3. Press the A button to select the A output.
4. Press Micro to hear your voice from the headset.

9.3.3.5 Translation

1. Press any of the listening preselected buttons 1 to 5 to select the channel you want to listen to. Or press Floor/Auto-relay switch to listen to Floor or auto-relay channels.
2. Press the A or B output button to select the output channel.

• When the engaged indicator of the output channel is lit, the channel is already occupied by other interpreter set.

• When the B output is set to 2 preselected channels in the installation mode, pressing B longer to release and switch the display of B1 and B2 preselected channels.

3. Press the Micro key to turn on the microphone.

• The Micro key lamp lights up.

• If the blind tone is enabled, the headset beeps.

• If the speaking timer is enabled, the speaking timer will start at 00:00:00.

9.3.3.6 Change the Channel of the Monitor Speakers

In the case that the interpreter station does not turn on, rotates the main knob can be directly change the channel of the monitor speaker. After all the interpreter set in the room are closed, the speakers of the interpreter set will play.

9.4 Installation

Interpreter sets can be connected to any bus port of VZ 8100CU by CAT5. Each bus can connect up to 16 interpreter sets and in VZ 8000 system can realize the connection to 144 interpreter sets.

Note:

No single extension cable must exceed a length of 100m. If the distance between the interpreter set and the controller is over 100m, the power injector or power distributor can be used.

10 VZ 81x0GM Gooseneck Microphone

VZ 81x0GM Gooseneck Microphone can be connected to all KLOTZ conference discussion units and interpreter sets.

10.1 VZ 81x0GM Gooseneck Microphone Features

- High fidelity microphone cartridges
- Cardioid pattern*
- Shockproof & noise proof construction
- Illuminated ring on microphone head
- Special high quality plug
- Metal shell
- Flexible gooseneck
- High close talk SPL level
- Low noise level

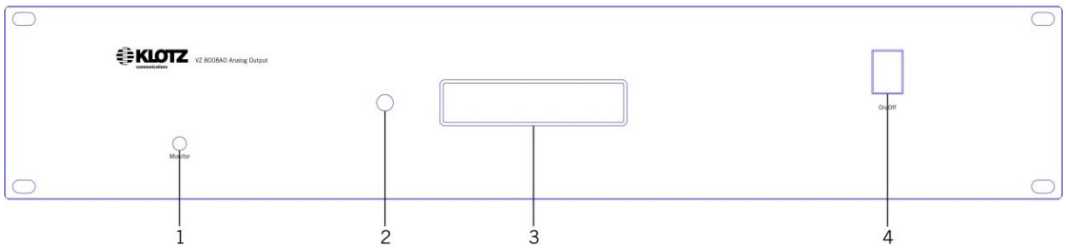
*The conference microphones feature a cardioid sensitivity pattern in the entire speech frequency spectrum to ensure minimum risk of an acoustical feedback arising from the sound reinforcement system.

The Gooseneck Microphone is available in two different lengths, which are VZ 8140GM of 40 cm and the VZ 8150GM of 50 cm.

11 VZ 8008AO Analogue Audio Output

VZ 8008AO is a 8 channels analog output device which is used to convert the digital signals of the VZ 8000 interpretation channels to analog signals then to other language distribution system, such as wireless infrared system, PA system, etc.

11.1 Front Panel



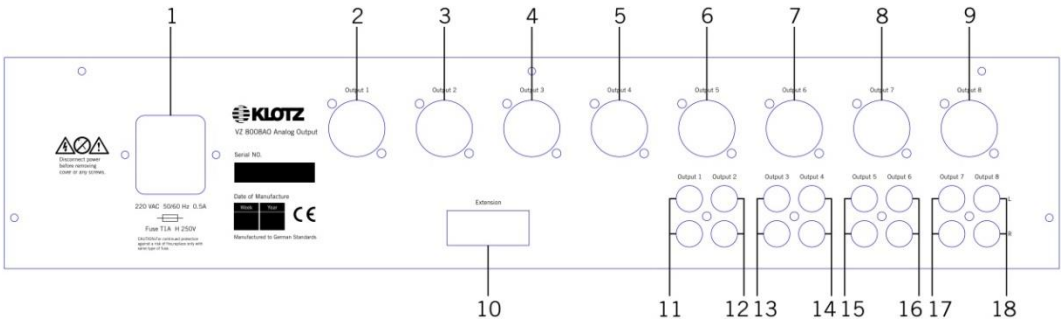
1: Monitor
Headphone jack is use for monitoring 8 channels audio.

2: Scroll Knob
It is used for the system configuration and status check.

3: LCD Display
The LCD displays the system status and setting information, etc.

4: Power ON/OFF
The switch is used for control the power supply on and off.

11.2 Rear Panel



Connector 1: Power Connector

Connector 2~9: 8 channels audio output XLR port

Connector 10: Extension

Connected to VZ 8100CU for the audio signals from the interpretation system.

Connector 11~18: 8 channels audio output RCA port

11.3 Installation

VZ 8008AO can be connected to the central controller by CAT5 cables, which audio output signals can be connected to any audio input device.

12 VZ 8054PD Power Distributor

Power Distributor Unit VZ 8054PD has 4 buses for connecting microphone units or Channel Selectors. Each bus can directly connect to 16 microphone units.

12.1 Installation

VZ 8054PD can be connected to the central controller by CAT5 cables, which buses can be connected to microphone units, interpretation units and Channel Selectors, etc.

13 VZ 8050PS Power Injector

The Control Unit VZ 8100CU has 8 buses and each bus can directly connect 16 microphone/interpretation units. If more microphone/interpretation units need connect to one bus, Power Injector VZ 8050PS is the perfect solution. Each VZ 8050PS can connect 16 microphone units. VZ 8050PS is only a power source and is incapable of refreshing the signal, so if a VZ 8050PS is connected to the bus, the cables total length (include the cables between the microphone units) after the VZ 8050PS cannot exceed 100 meters.

13.1 Installation

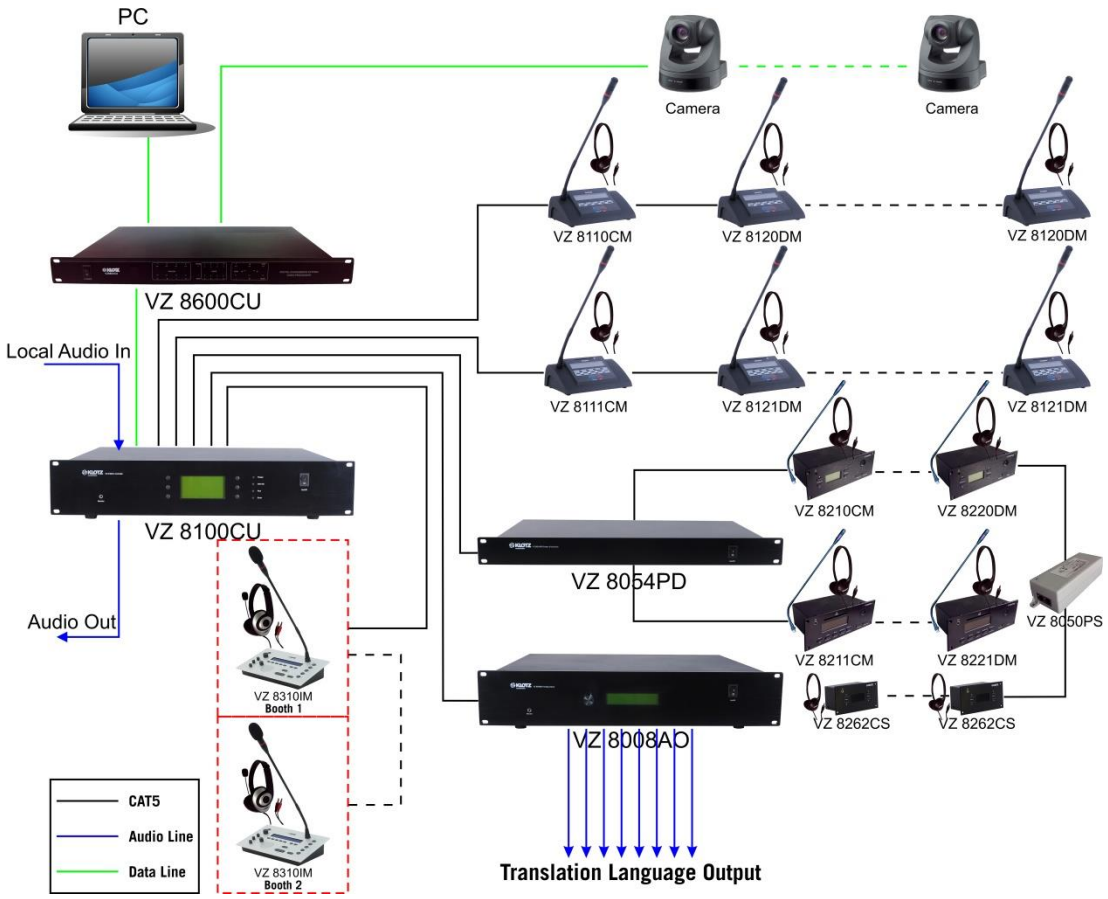
The installation of the Power Injector is quite easy, connecting the cable from one microphone into the Data In port of the Power Injector, then connect another microphone to the Data&Power Out port of the injector.

14 System Installation Guide

14.1 System Installation

The installation of VZ 8000 system is quite easy. Central controller offers 8 microphone buses and each bus can be directly connected to 16 units by CAT5 cables. The system needs daisy chain connection way and each microphone should connect to the previous one.

System connection:



14.2 Microphone Units

There are two versions of microphones which are Portable and Flush mounted units. The Flush mounted units have the same function as the Portable units. The Flush mounted units are always used for permanent fixed installations. We can also combine both versions in one project.

If the project need voting function, you can also choose the units that with voting function.

The Flush mounted units are mounted in a hole cut out in the table top. The hole in the table must have the correct measurements. And the flush panel must be placed correctly with the front against the user/delegate.

Always switch off the main power on the central controller before removing or adding units to the system. Otherwise, the system might be damaged.

You must configuration the microphone quantity after removing or adding units to the system.

The system should keep the length of all cables as short as possible to maintain high audio quality and low noise operation. To obtain best performance it is recommended only to use 2m of customized cable between units. Only KLOTZ VZ 8090 special extension cable can be used. The maximum bus cable length cannot exceed 100m, the diameter of the system cannot exceed 200m (which includes the 2m cable between microphone units). VZ 8054PD can extend the radius of the system, the maximum length can up to 1.6km after extend.

It does not allow having open cable in the system (no termination unit). It might cause problems for the data transmission and pick up audio noise.

14.3 Interpretation Unit

It can be set maximum 24 channels interpretation in one system. Every interpretation booth can place 6 interpreter sets, so it can be connected maximum 144 interpreter sets in one system. We suggested that each booth should connect to the controller's bus interface directly.
To obtain best performance we are recommended only to use 2m of customized cable between interpretation units in one booth.

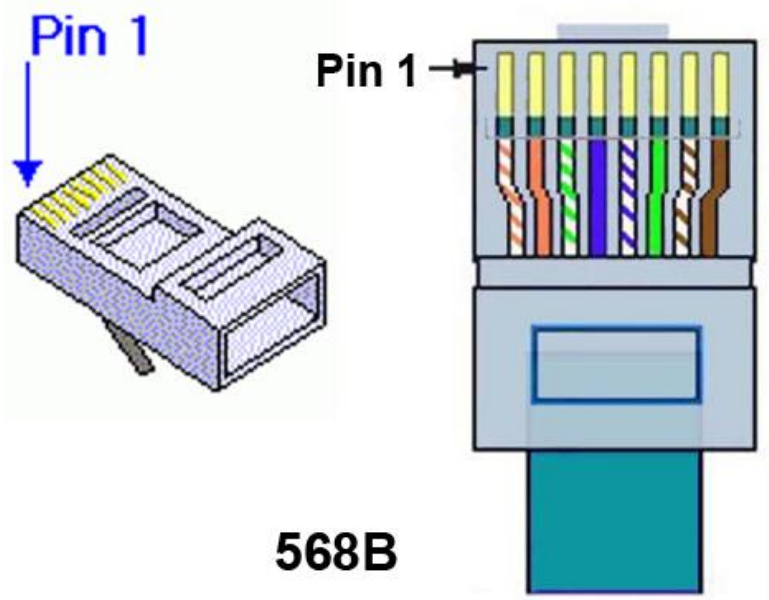
14.4 Extension Unit

The installation of Analog Audio Output Device, Power Distributor, Power Injector, Channel Selector and other extension units please refer to corresponding chapter.

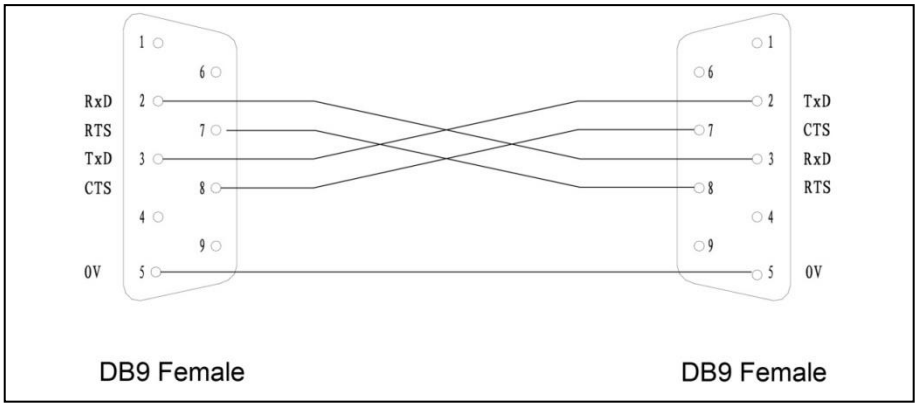
14.5 Pin Assignments and Cable Making

- **Microphone Bus**

For stability of the system, it is recommended to use the standard CAT5 cables, and the connector of the cables must according to 568B wiring method.

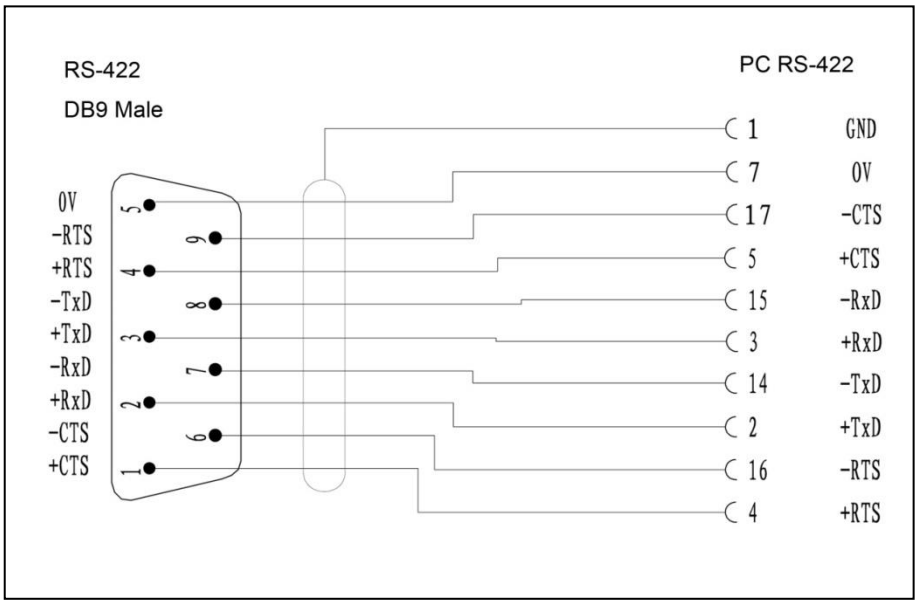


- **RS-232 9pins for external device:**



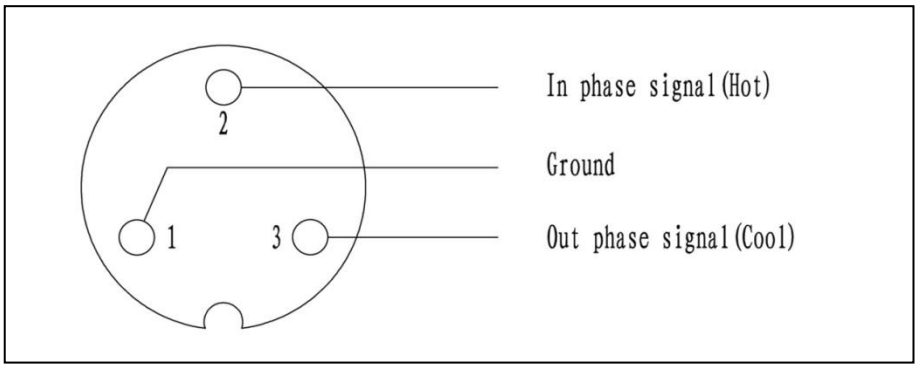
Cable between 2 DB9 female connectors must be less than 10m.

- **RS-422 9pins for external device**



Cable between PC and RS-422 must be less than 1000m.

- **XLR balance Line in/ Line out**



15 Specifications of VZ 8100CU

Indicators and operating elements (front panel)

Display and push buttons	Monochrome, graphics-capable LC display, 128 x 64 pixels, green backlight; 6 push buttons to carry out system settings and selections.
LEDs indicator	4 LEDs for system configuration and status check.
Monitor socket	3.5mm jack socket to monitoring or recording.
Power switch	1 switch for power control.

Connectors and switches (rear panel)

1 x 3-pin male power connector

• Power connector for the connection of the device to the power supply system

1 x 4-pin type A USB connector

• Type A USB connector for download or upload conference configuration

1 x 4-pin type B USB connector

• Type B USB connector for updating system

2 x 8-pin RJ45 connectors

• RJ45 connector for system expansion

8 x 8-pin RJ45 connectors used for the following:

• Microphone/Interpreter buses
• Power supply for units
• Transmit audio and control signal

1 x 9-pin female connector used for the following:

• RS232 port for external control

1 x 9-pin male connector used for the following:

• RS422 port for external control

2 x 3-pin XLR female connector used for the following:

• Local microphone input
• Line input

4 x 3-pin XLR male connector used for the following:

• Microphone Units audio output
• Interpretation channel 1~3 output

Mic input

Frequency response	300 Hz ~ 20 kHz @ -3 dB, with low cut, from Local Mic Input to Line Output 1 ~ 4; or 80 Hz ~ 20 kHz without low cut
S/N ratio	80 dBA on each Line Output to Mic Input with Dynamic Mic. 91 dBA on each Line Output to Mic Input with Condenser Mic.
Common mode rejection	100 dB
Dynamic range	85 dB @ -20 dBu
Sensitivity	-50 dB, Dynamic -30 dB, Condenser
Impedance	4 kΩ
Max. input level	-40 dBu, Dynamic -20 dBu, Condenser
Connector	1 x 3-pin XLR connector

Line input

Frequency response	20 Hz ~ 20 kHz @ -1 dB, from Line Input to Line Output 1 ~ 4
S/N ratio	94 dBA on each Line Output to Line Input
Common mode rejection	100 dB
Dynamic range	90 dB
Impedance	24 kΩ
Input level	12 dBu
Max. input level	12.5 dBu
Connector	1 x 3-pin XLR connector

Line output

Output Impedance	50 Ω
Level	18 dBu Max.
Frequency	300 Hz ~ 20 kHz @ -3 dB, with low cut, from local Mic Input to Line Output 1 ~ 4; or 80 Hz ~ 20 kHz without low cut 20 Hz ~ 20 kHz @ -1 dB, from Line Input to Line Output 1 ~ 4 20 Hz ~ 20 kHz @ -1 dB, from Microphone Unit to Line Output
S/N ratio	80 dBA on each Line Output to Mic Input with Dynamic Mic. 91 dBA on each Line Output to Mic Input with Condenser Mic. 94 dBA on each Line Output to Line Input

	87 dBA on each Line Output to Microphone Unit
Distortion	< 0.1 %
Connector	4 x 3-pin XLR connector

General data

Microphone capacity	250 units
Sampling frequency	48 kHz
Audio resolution	24 bit
Power requirement	85 ~ 264 V AC, 47 ~ 63 Hz
Power consumption	560 W max.
Temperature to guarantee specified performance:	5°C ~ 45°C (20 to 95% humidity)
Storage temperature	-20°C ~ 70°C (up to 99% humidity)
Dimensions(W*D*H)	486mm x 337mm x 88mm
Material	Metal
Weight	7.5 kg
Color	Black

16 System Components Description and Order Number

Model No.	Description	Products No.
VZ 8100CU	Fully digital central controller integrates discussion, voting and interpretation in one system.	14 820 8100
VZ 8110CM	Portable Chairman discussion unit, w/ 2m cable and channel selector, w/o gooseneck microphone.	14 810 8110
VZ 8120DM	Portable Delegate discussion unit, w/ 2m cable and channel selector, w/o gooseneck microphone.	14 810 8120
VZ 8111CM	Portable Chairman discussion and voting unit, 2m cable and channel selector, w/o gooseneck microphone.	14 810 8111
VZ 8121DM	Portable Delegate discussion and voting unit, 2m cable and channel selector, w/o gooseneck microphone.	14 810 8121
VZ 8210CM	Flush Mount Chairman Discussion unit, w/ 2m cable and channel selector, w/o gooseneck microphone.	14 820 8210
VZ 8220DM	Flush Mount Delegate Discussion unit, w/ 2m cable and channel selector, w/o gooseneck microphone.	14 820 8220
VZ 8211CM	Flush Mount Chairman Discussion and Voting unit, 2m cable and channel selector, w/o gooseneck microphone.	14 820 8211
VZ 8221DM	Flush Mount Delegate Discussion and Voting unit, 2m cable and channel selector, w/o gooseneck microphone.	14 820 8221
VZ 8310IM	24-channel Interpreter Set	14 830 8310
VZ 8008AO	8 channels Analog Output device	14 800 8008
VZ 8054PD	Power Distributor has 4 buses, each VZ 8054PD can connect up to 64 microphone units.	14 800 8054
VZ 8050PS	Power Injector can connect 16 microphone units.	14 800 8050
VZ 8260CS	Flush Mount Voter & Channels Selector	14 820 8260
VZ 8140GM	Gooseneck microphone, 40cm length, w/ high intensity light ring, w/ round head	15 800 8140
VZ 8150GM	Gooseneck microphone, 50cm length, w/ high intensity light ring, w/ round head	15 800 8150
VZ 8312HP	Headset for the Interpretation Unit	14 830 8312
VZ 8370EP	Stereo Headphone, 3.5mm plug	13 830 8370
VZ 8090-02CB	CAT6, 2m Category 6a U/FTP - 500 MHz	14 800 8090-02
VZ 8090-05CB	CAT6, 5m Category 6a U/FTP - 500 MHz	14 800 8090-05
VZ 8090-10CB	CAT6, 10m Category 6a U/FTP - 500 MHz	14 800 8090-10
VZ 8090-20CB	CAT6, 20m Category 6a U/FTP - 500 MHz	14 800 8090-20
VZ 8090-30CB	CAT6, 30m Category 6a U/FTP - 500 MHz	14 800 8090-30
VZ 8090-50CB	CAT6, 50m Category 6a U/FTP - 500 MHz	14 800 8090-50

17 Appendix

Item	Chinese	English	Abbreviation	Item	Chinese	English	Abbreviation
1	原声	Floor	Flo	32	亚美利亚语	Armenian	ARM
2	阿尔巴尼亚	Albanian	ALB	33	阿塞拜疆语	Azerbaijani	AZE
3	阿拉伯语	Arabic	ARA	34	巴厘语	Balinese	BAN
4	保加利亚语	Bulgarian	BUL	35	孟加拉语	Bengali	BEN
5	加泰罗利亚	Catalan	CAT	36	缅甸语	Burmese	BUR
6	汉语	Chinese	CHI	37	白俄罗斯语	Belarusian	BEL
7	捷克语	Czech	CZE	38	科西嘉语	Corsican	COS
8	丹麦语	Danish	DAN	39	爱尔兰语	Irish	IRI
9	荷兰语	Dutch	DUT	40	哈萨克语	Kazakh	KAZ
10	英语	English	ENG	41	吉尔吉斯语	Kirghiz	KIR
11	芬兰语	Finnish	FIN	42	老挝语	Laotian	LAO
12	法语	French	FRE	43	蒙古语	Mongolian	MON
13	德语	German	GER	44	尼泊尔语	Nepali	NEP
14	希腊语	Greek	GRE	45	塔吉克语	Tajik	TGK
15	希伯来语	Hebrew	HEB	46	泰国语	Thai	THA
16	匈牙利	Hungarian	HUN	47	藏语	Tibetan	TIB
17	印度尼西亚	Indonesian	IND	48	土库曼斯坦	Turkmen	TUK
18	意大利语	Italian	ITA	49	乌克兰语	Ukrainian	UKR
19	日语	Japanese	JAP	50	越南语	Vietnamese	VIE
20	韩国语	Korean	KOR	51	粤语	Cantonese	CAN
21	马来语	Malay	MAL	52	克罗地亚语	Croatian	CRO
22	挪威语	Norwegian	NOR	53	斯洛伐克	Slovak	SLO
23	波斯语	Persian	PER	54	斯洛文尼亚	Slovenian	SLV
24	波兰语	Polish	POL	55	爱沙尼亚	Estonian	EST
25	葡萄牙语	Portuguese	POR	56	拉脱维亚	Latvian	LAT
26	罗马尼亚语	Romanian	ROM	57	立陶宛	Lithuanian	LIT
27	俄语	Russian	RUS	58	乔治亚语	Georgian	GEO
28	塞尔维亚语	Serbian	SER	59	冰岛语	Iceland	ICE
29	西班牙语	Spanish	SPA	60	音乐	Music	MUS
30	瑞典语	Swedish	SWE	61	未知语种 1	Unknown1	UN1
31	土耳其语	Turkish	TUR	62	未知语种 2	Unknown2	UN2