

# INSTALLATION AND OPERATION MANUAL





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#### About the Manual

- 1. Purpose: Provide installation, configuration and operation DVA6 system information.
- 2. Target reader: Professional technician after training.
- 3. Terminology

Controller-DVA6-500;

Extension- DVA6-500RT;

Operation Mic-DVA8-500RM;

Software;

The software of this system will be continuously upgraded, but backward compatibility. Please note the company's website real-time information.

#### System Overview

EVAC system is both PA system and voice alarm system. The system Integrated with requirements of EN60849, BS5839/8 and EN54-16 evacuate standard. Usually used in must small system which need voice evacuation or system that only need one call channel.

#### Features

Meet the requirements of GB16806-2006 standard and European voice alarm control and Indicating equipment standards

Automatic fault diagnosis system, data backup Line redundancy and record fault state<=5000 Safe, stable and reliable

System compatible with three wire system and four wire system standard wiring

Emergency message pre-recorded or customized of different languages

System programming to the zone, Support manual, automatic, district, grouping operation

Support Visual man-machine interface, control system, and support several windows man-machine interface, control system, after configuration system can off-line working;

#### System Capacity



#### Important Notice for System Operation

**DVA6-500/DVA6-500RT** (Host/ extension host) DVA6-500 is The core of voice alarm system EVAC, built with 240W/350W/500W digital amplifier, enable to manual or auto broadcast the emergency message, also fireman microphone evacuation is also possible under emergency, system capacity up to 120 zones with paging and background music functions, monitoring includes amplifier failure, speaker line failure, emergency message and emergency microphone supervision.

- Emergency message format of \*.wav.
- SD card message number shall be less than 255 in the file root of "evac\_message/" & "alert\_message/" & "prompt/".
- Make sure the software standby amplifier configuration is same as real amplifier wiring, otherwise, the host DVA6-500 will not auto standby to backup amplifier without software correct configuration.
- 6 zone speaker outputs, each zone max power output is 500W, total 6 zone power output max is 500W.
- With 6 external microphone or line inputs for analog microphone use or external audio sources input.
- With control input and control output to inter-work with third party system.
- With 3000 events history record includes power module, fireman mic, emergency message, amplifier & speaker line.
- System capacity of 32 units remote paging microphone up to 600 meters through CAT5 or CAT6 straight cable.
- System support redundancy cable wiring among remote paging microphone, host and extension host within 600 meters.

#### 1.1. DVA6-500 & DVA6-500RT Front Panel



#### **(1) AC Power Indicator.**

Green----means currently host AC supply normal; Yellow----means currently host AC supply failed.

#### 2 DV24V Indicator.

Green----means normal; extinguish----means no software configuration; Yellow----means failed.

#### **③** Communication Indicator among Host and Extension.

Yellow----means no logical or physical connection; extinguish----means no logical or physical connection between system with host; Green----means currently device connection is normal.

#### **④** Fault Indicator.

Off means system working well unless the dipswitch PIN of all supervision function is disable on rear panel; yellow means system fault, otherwise press "ACK/REST" to restore the system.

#### **(5)** Emergency Microphone Indicator.

Yellow----means microphone lost or faulty; Green----means working well; extinguish----means microphone is normal but it is not working.

#### 6 Indication Test Button.

Press the button to light on the LED indicators of all equipments include host, extension and paging microphone to test the indication working well.

#### ⑦ Emergency Button.

Red flash—emergency mode; extinguish--normal mode.

Making Emergency Broadcast: a) Emergency broadcast will be activated by manual press the button and red light flashing. b) Auto emergency broadcast will be activated by the trigger inputs on the rear panel of host and extension unit and red light flashing.

Reset the Emergency Mode: a) Press the "ACK/Reset" button on the front panel to exist the emergency mode to terminate the emergency broadcast and terminate the zone output. b) Input a reset signal to the emergency control input terminal on the rear panel of the EVAC-500 which has been assigned a reset function. These events history could be recorded and inquired in the software history record.



#### **8 ACK/RESET Button**

a). If the system various modules work normal or abnormal system module diagnosis but press the button when the indicator "FAULT" light is not flashing, equipment do not do any processing;

b). If the system module in the diagnosis of abnormal, "FAULT" of FAULT indicator light flashing, press some button, "FAULT" stopped lighting from blinking, blinking indicating its disabled state ,Buzzer to stop till To the new module detects abnormal after heavy shine again "FAULT" LED lamp and start the buzzer hint user;

c). When the current partition has output, press the build close the current audio output, quick exit and quit play;

#### (9)/(1) EVAC & Alert Emergency Message Button & Indicator.

Green——"EVAC MSG/ALERT MSG" Voice is in broadcast information ; Yellow——"EVAC MSG/ALERT MSG" Lose voice information or loss SD card; Extinguish—— "EVAC MSG/ALERT

#### MSG" Normal.

**Note:** 1."EVAC voice information" refers to the EVAC voice ALERT and voice; 2. If you need to manually play EVAC voice messages, Need to enter the emergency mode, Then press the voice messages button; 3. System default "EVAC" Voice priority is higher than "ALERT". Can change the priority through the software configuration...If not special application requirements, please do not change it.

#### ① Line Input Selector Output switch selective switch.

Mainly used to select the external line input to this host or extension.

**Note:** The choice of the current user can see through the software interface, To change the different audio output, Only through use to choose from the panel.

#### 12 All Zone Selector.

To select all six zone outputs open or close at the same time.

#### **13** Zone Fault Indicator.

Yellow-The current partition A and B or A or B speaker impedance change, may be open or short circuit. Extinguish-The current speaker zone loop impedance changes within the impedance of the speaker when it was pre-set.

**Note:** When the host or extension host access system according to the project wiring work needs a resistance to proofread before obtaining the loop impedance value of the current speaker, please follow below steps:

Unplug the host back row ID switch. 7, Until hear buzzer sing alternately or see panel lights flashing after "FAULT" then, Put the 7th ID switch it on. When the speaker circuit impedance change more than the current host or extend the host for the impedance value plus or minus  $10\% \sim 10\%$ Will record the current changes and inform the user in the form of light. Zone detection sensitivity is more than 20W

#### **1** Zone Emergency Microphone or Remote Microphone Indicator.

When paging, can manually close the zones where no need paging or add new zones.

#### **(15)** Zone Emergency Broadcast Indicator.

When EVAC and alert emergency broadcast is working, the indicator will be light on.

#### **16** Zone Background Music Indicator.

When background music broadcast is working, the indicator will be light on

**Note:** Manual broadcast voice messages need choose audio first, then, choose output zone, For example, if you want output line 3 in  $3^{rd}$  zone, you can choose line 3 audio then choose  $3^{rd}$  zone. You also can choose  $3^{rd}$  zone, then, choose line 3. Two ways are the same, normally, we choose zone firstly, then choose audio. In this way, each zone will output audio at the same time, We also can control different zones from the software operation.

### Zone Selector.

To select individual six zone output open or close.

#### **18** Zone Output Attenuator.

Increase or decrease the individual zone speaker output loudness at 6 levels and max control of -15dB.



Input for the emergency microphone or fireman microphone of priority.

#### **20** Monitor Speaker Attenuator.

Increase or decrease the built-in monitor speaker loudness.

#### (1) Emergency Microphone Gain Control.

It is used to adjust the emergency microphone input sensitivity.

#### 2 Treble Control.

Increase or decrease the overall treble output.

#### **23** Bass Control.

Increase or decrease the overall bass output.

#### **(24)** Master Volume Control.

Increase or decrease the overall master volume output.

#### 1.2. DVA6-500 & DVA6-500RT Rear Panel





#### 1 24V DC Power Input.

24V DC input for sealed lead-acid battery, UPS or equivalent product; Note:

1. Use EN54-4 certificated power supply when EN standard required.

2. Do make sure the 24V DC could meet the minimum working current of the host. For example, full loading of EVAC-500 at 500W, the lead-acid battery shall supply the current higher than 27A, battery capacity higher than 27Ah and working time shall be full loading\*27Ah\*1.2 hours.

#### ② Six Zone 24V Relay Outputs.

For 4 wired volume control, each zone rated output current is 0.2A, max total six zone outputs less than 28W.

#### ③ Six A/B Speaker Zone Outputs.

Direct connection of 100V loudspeakers or 3 wire volume control. Output voltage is 0-100V. Speaker output could be wired one output or both A/B output, A/B output could be backup once one speaker zone disconnection or faulty. Each individual zone max outputs is 500W in the condition of the total six zone output max less than 500W.

#### Note:

- At least one time speaker zone modeling is needed after speaker wiring.
- Some zone without speaker leave it vacant is OK.
- Software can be pre-set some speaker zone not allowed output.



Universal 100V Speaker with 3 Wire Volume Control Connection

#### **4** 8 Program Control Outputs.

These outputs usually shall be keep open, which could be programmed in the software to activate it or terminate it auto or manually.

#### **(5)** 8 Program Control Inputs.

These inputs usually shall be keep open, which could be programmed in the software to activate it or terminate it auto or manually.

#### 6 LAN Input for PC Software.

It is mainly used to connect to software for setting, program and manual operation. **Note:** 

1) Default IP address: 192.168.1.168, Communication port number: 16888.

2) Reset the IP address to default by enable & disable once time the dipswitch 6<sup>th</sup> PIN on the rear panel of host.

3) If you dislike the default IP address, please up the 5<sup>th</sup> dipswitch to open DHCP function. Make sure your network router opened up the DHCP function.

4) Support PC software directly connection to DVA6-500, automatic identify cross and straight cable. All communication cable shall be meet TIE/EIA-568B standards including connection to extension and remote paging microphone.

#### **7** Remote Paging Microphone Input.

Use straight cable to connect the remote paging microphone DVA8-500RM to the host, system capacity of 32 units and communication distance is up to 600 meters. Support microphone loop connection or star connection as below picture, the system software will auto distinguish different kinds of cable connection.



Closed or loop connection mode



Star connection

#### 8 Extension controller DVA6-500RT Input.

Use straight cable to cable to connect the extension controller DVA6-500RT to the host, system capacity of 19 units extension and communication distance is up to 600 meters. Support microphone loop connection or star connection as above remote paging microphone pictures, the system software will auto distinguish different kinds of cable connection.

#### (9) Emergency Message Memory Card.

The emergency message memory card is real time monitored, tested memory capacity of 32G, never plug out this card during work, otherwise the event record and program will be lost. The root of emergency message as below picture, there is each one Alert and EVAC default messages, edit, add or delete or replace these messages are possible done by professional technician, these messages will be real time supervised. "Log" file is log in event record, which could be inquired or download in software. "Prompt" means chime before announcement, so customized chime could be replaced the default one in DVA8-500RM, this message is not real time monitored, only will be reviewed once after power on, so no chime or file lost will be not warned as fault. Max message number is 255.



#### (10) Standby or Extension BGM Amplifier 100V Input.

The standby amplifier will be auto switched in service once the main amplifier have faulty, the standby amplifier power shall be same watts or higher watts than the main amplifier. The standby amplifier could be use as music amplifier in normal mode, it will auto switched to standby mode in case of main amplifier failed.

#### (11) Standby or Extension BGM Amplifier Balanced Line Output.

This balanced output will be connected to the standby amplifier balanced line input.

#### (12) Fault Output.

Any fault of the system, the output will be open circuit to send contact to third party system for inter-communication, no fault, the circuit will be closed.

#### (13) Emergency Output.

In case of EVAC emergency broadcast, the output will be open circuit to send contact to third party system for inter-communication, no fault, the circuit will be closed.

#### (14) Remote Reset Input.

In case of emergency broadcast, a 0.5S or higher relay short circuit input which will be acknowledged as reset action, this input usually is from CIE equipment for remote control. This input will be ignored during normal mode.

#### (15) Function Configuration Dipswitch.

Upward means enable and downward means disable. 1<sup>st</sup> PIN means all functions supervision. 2<sup>nd</sup> PIN means 24V DC input. 3<sup>rd</sup> PIN enable means contact trigger and disable means signal level trigger. 4<sup>th</sup> PIN means with standby amplifier. 5<sup>th</sup> PIN means dynamic IP address allocation or DHCP. 6<sup>th</sup> PIN means host default IP address reset through off-on-off action. 7<sup>th</sup> PIN means speaker zone impedance calibration in the condition of zone output is terminated. 8<sup>th</sup> PIN means speaker line supervision function.

#### (16) External Two Microphone or Balanced Line Inputs 5-6.

#### (17) Gain Control.

These gain control is used to increase or decrease the input sensitivity for MIC/Line inputs 5-6.

#### (18) Line Inputs1-4.

These four line inputs used to input external audio sources players for background music system use.

#### (19) Host REC Output.

This REC output is mixed output for external voice recorder or other recording equipment.



#### **(20)** Extension Controller Function

Configurable Dipswitch. Upward means enable and downward means disable. 1<sup>st</sup> PIN to 5<sup>th</sup> PIN is used to set up the extension controller ID number. 6<sup>th</sup> PIN means 24V DC input. 7<sup>th</sup> PIN means standby amplifier. 8<sup>th</sup> PIN means speaker line supervision function.

## 1.3. Technical Specifications

Model		DVA6-500	DVA6-500RT	
Description		Host	Extension Controller	
AC Electrical Part	Power Supply	AC220V-250V, 50/60Hz		
	Power	650W		
	Consumption			
	Max Current	<3A		
	Fuse	250V/5A, low speed type		
DC Electrical Part	Power Supply	24V DC, 20V-27.5V		
	Max Current	<27A		
Emergency	Sensitivity	5mV		
Microphone	Impedance	600Ω		
Line Input 1-6	THD	<1%, at rated power output,	1kHz	
	Sensitivity	775mV		
	Impedance	10kΩ		
	S/N Ratio	>70dB		
Control Input &	Fault Output	Closed circuit, no voltage		
Output	EVAC State Output	Closed circuit, no voltage		
	EVAC Reset Input	Closed circuit, no voltage, T>0.5s		
	8 Program Control	Closed circuit, no voltage		
	Output			
	8 Program Control	Way-1: Closed circuit, no vo	-	
	Input	Way-2: Level input and max	3.3V	
Emergency	Format	WAV		
Message	Memory Card	SD memory card		
	Capacity	32G		
	Message No.	255 Max		
	Period	10 years		
	Format	HEX		
	Storage Way	Nand Flash		
Log Event	Event No.	1000		
	Period	10 years		
Working	Operation Temp	<b>+5℃~+40℃</b>		
Environment	Storage Temp	-20℃ ~ +70℃		
	Relative Humidity	< 95%		
Mechanical Spec	Dimension	484(W)x132(H)x449(D)mm	(3U)	
	Net Weight	11.5kg		
	Rack Mount	19" rack mount type		
	Finish	Aluminum plate and metal c	ase in black	

#### Remote Paging Microphone — DVA8-500RM

#### Description

DVA8-500RM is used to remote zone paging over the EVAC system, support 12 zones and 12 groups programmable control. Support the redundant cable wiring, system capacity of 32 units and communication distance up to 600 meters, the paging microphone will be real time monitored by the system.

#### Feature

Easy intuitive and user friendly operation paging console Configurable PPT paging mode and normal paging mode With 9 levels of configurable priority Support 24V phantom power supply, no need extra power adapter System capacity of 32 units paging microphone Balanced signal transmission ensure distance up to 600 meters Support the redundant loop cable wiring for microphone supervision

#### Front Panel and Rear Panel:



#### 1 Power Indicator.

The indicator is used to indicate power on/off or busy. Green-phantom power supply normal. Red flash-busy. Extinguish-No power supply. Note: Red flash always to check the ID configuration whether is correct. Green indicator and button no response, please check the CAT6 cable connection is well. All indicator flashing in green, please check the paging microphone configuration in the software, after that please reset the system.

#### ② Microphone Input.

The microphone input is balanced input, after select the zone and press the call button, the red round indicator of this gooseneck microphone light on means ready for announcement.

#### ③ Zone Indicators.

Light on means working. Flash means zone has been selected. Extinguish means no working.

#### **④** Zone Selectors.

There are 12 zone selectors whether been used to select individual zone or program group. In case of no paging, press the button when indicator extinguished or illuminated means zone selection. Press the zone button under paging means zone change either to terminate the zone paging or add the zone paging.

#### **(5)** All Zone Selector.

Select or deselect all zones and the indicator will be illuminated or extinguished accordingly. Button program to include some zones into one groups shall be configured in the software, thus this button is only used to make group paging, individual zone paging is disabled. One button is only been used whether individual zone or one group paging, could be not used of both mode at the same time.

#### 6 Call Button.

Press the button after zone selection to start the paging. Press the button to terminate the paging in case of announcement. Under PPT paging mode, keep pressing this button to speak, release the button to terminate the announcement.

#### 7 Power Switch.

The 24V phantom power from the host DVA6-500 will direct power the paging microphone, so please ensure the connection well between the paging microphone and the host then to switch on the power.

#### 8 Link Connector.

One port used to communicate with the host and another is used to cascade the next remote paging microphone.

#### **(9)** Microphone Output Gain Control.

Increase or decrease the gain for the microphone output.

### **1** Line input.

This input will be mixed output with the gooseneck microphone.

#### 1 ID Configuration Dipswitch.

Upward means enable and downward means disable. 1<sup>st</sup> to 5<sup>th</sup> PIN means ID of binary system. 6<sup>th</sup> PIN upward means normal paging mode and downward means PPT paging mode. 7<sup>th</sup> PIN upward means individual zone and downward means group, group could be defined with multiple zones. 8<sup>th</sup> PIN is indication test, downward means start the LED indication test, all LED indicator will be from red-green-yellow then to normal state. Below is example of remote paging mic ID from No 1 to No 4.



#### 1.5 Technical Specification

Model	DVA8-500RM				
Description	Remote Paging M	Remote Paging Microphone			
System Capacity	32 units				
Communication	600 meters				
Distance					
System	Star connection o	r loop redundancy connection			
Connection					
Zone Number	12 zones or 12 gr	oups			
Paging Mode	PPT & normal page	ging modes			
Electrical Part	Phantom Power	20V-27.5V			
	Voltage				
	Max Current	<0.1A			
	Power	<2.4W			
	Consumption				
Line Input	Sensitivity 775mV				
	Impedance	10kΩ			
	S/N Ratio	>70dB			
Microphone Input	Sensitivity	5mV			
	Impedance	600Ω			
Working	Operation Temp	<b>+5℃~+40℃</b>			
Environment	Storage Temp	-20℃ ~ +70℃			
	Relative < 95%				
	Humidity				
Mechanical Part	Dimension	240(W) x 140(D) x 55(H) mm			
	Weight	1kg			
	Finish	Aluminum case in black			

#### System Connection Example:



#### **Operation Guidance**

#### **Bill of Equipments:**

Host, DVA6-500×1 Extension, DVA6-500RT×2 Remote Paging Microphone, DVA8-500RM×32 Software×1

#### • Background Music Broadcast.

Input the audio sources or microphone to the line input1-6 on rear panel, select the line input through the source selector on the front panel of host or extension unit, open the zone output

with corresponding BGM indicator means background music broadcast. **Note:** The emergency message and emergency microphone will be shared between host and extension unit, while the line inputs 1-6 are only for itself use.

#### • Manual Emergency Broadcast.

Press the emergency button and illuminate in red, then select the zone and press the "EVAC MSG" or "Alert MSG" to make the manual emergency broadcast in the condition of message indicator light on and zone EVAC indicator light on. Press again the emergency button or remote reset input to terminate the emergency broadcast.

#### • Auto Emergency Broadcast.

From normal status, connect a timer or other external control equipment to the 8 program control input terminals of the host or extension unit. The control input terminals receive a control input from the timer or allows an automatic general announcement or emergency message to be broadcast. At the same time, a control output will be send out to third party control system for inter-action. There are two kinds of control inputs by short circuit contact or by level mode. Press again the emergency button or remote reset input to terminate the emergency broadcast.



#### • Emergency Microphone Announcement.

Press the clip of emergency microphone to make emergency announcement to all zone any time, the pre-announcement chime will be broadcast first and the EMG microphone indicator will light on means ready for emergency announcement, hang off the microphone to terminate the broadcast. This emergency microphone circuit will be real time supervised.



General Announcement from Remote Paging Microphone.

Select the zone and illuminate the zone indicator, press the call button to make the general announcement with chime. Under PPT mode, the call button need to be kept pressing to make the general announcement.

#### Background Music Broadcast from Software

A) Select the zone or group and choose the effective line input to make the general broadcast. The zone or group displayed only after configuration, the software will auto distinguish the effective line input. B) Move mouse to zone1 icon, and click the left to click the inverse button to control the zone output status. Green means output and extinguish means terminate output.



17	/	32

#### System Software

#### **Icon Introduction:**

	Save and synchronize to the DVA6-500 host, each
🛃 ок	revision should click on this OK button.
Application	Save but not synchronized to the EVAC-500 host.
Cancel	Give up the action.
0	Current zone is prohibited for operation.
	Current Zone is working
0	Zone impedance vibration (open circuit or short circuit)
۲	The current zone is normal, no broadcast.
0	The current zone is under emergency broadcast.
	The current system modules normal
- 6	The current system module faulty
✓	The current host normal
×	The current host system is faulty
3	Refresh
	Upload
	Save
Host	Host 01 means DVA6-500 Host 02 means extension unit 001

#### **Computer Configuration:**

AMD/Inter CPU 2.0G, Window XP SP3/Window 7/8/8.1/10.

#### Installation.

Double click the "setup.exe" or click right mouse "Run as administrator" to install the software.

**Note:** Because the Operating System of Win7 and above had higher security system, please make sure that you are install the software as Administrator, if not it will make the software install or will have trouble after it. Before that please check you have administration authority or not, and the method as below: Click on the icon "EVAC.exe" by right mouse to select the properties to run as administrator.



#### Keep the PC and Host DVA6-500 in the same network segment.

(Host default IP address: 192.168.1.168, Sub Mask: 255.255.0.0, gateway: 192.168.1.1).

Downward the 5<sup>th</sup> PIN of configuration dipswitch on the rear panel of host to have dynamic IP address allocation or DHPC. Please refer to below pictures to help the DHCP once IP allocation is rather slow.

	(🙂 EmergencyVoiceAlarmSystem
	System View Manage Help
() EmergencyVoiceAlarmSystem	🎄 i 🔯 i 💥 i 🔚 i 🍕 🔀 🚳 i 🌣 i 🕲 🛛
System View Manage Help	System Control_Config GRCUP ID GRC Network Parameter X
Retwork adapter	
	STATE 0.3 GR P address 192.168.1.107 ~
System Control_Co	05 GR Port number 16888
	Development of the second seco
System View Manage Help	IP address 192 - 168 - 1 - 168
	Subnet mask 255 - 255 - 0 - 0
Surtam Cantral Canfia	Default gateway 192 . 168 . 1 . 1
Color ID Set up communication r	Port number 16888
CONTROL 02 parameters, please keep network.	
	Acoleaton X Ext

♦ Click on the icon in the right corner of the PC by right mouse to select "Open Network and Sharing Center", and choose "Change adapter settings" when pop up window as below and change the properties Internet Protocol into as below to done the IP setting.

Network and Sharing Center	Internet Protocol Version 4 (TCP/IPv4) Properties		
← → ~ ↑ ¥ > Control F	General You can get IP settings assigned auton		
Control Panel Home	this capability. Otherwise, you need to for the appropriate IP settings. Obtain an IP address automatical		
Change adapter settings	IP address:	192.168.1.100	
Change advanced sharing	Subnet mask:	255.255.255.0	
settings	Default gateway:	192.168.1.1	

#### **Software Operation**

#### • Log In.

Double click" EVAC.exe" icon on desktop to log in the main operation page of the software. Click on to enter user name & password for identity verification. The software will be auto exist once 3 times wrong password input.

#### • Synchronize.

The first connection of software and DVA6-500 synchronization will be as below, after that will display the main page.



#### • Main Page of Software as the picture above:

The top is system menu and toolbar. Left is program item, middle is system status and right part is emergency status, emergency message & line inputs. Bottom is system status and time.

#### • Introduction of Menu Bar and Tool.

System-View-Manage-Help. System includes refresh, import, save, login and exit. View is used to customize different visual display of the system diagram. Manage include firmware download (No change), network adapter (Edit the IP address), empty all log (clear the log in event) and software security (Password is need to exist). Help is used to check the software version.



#### **1.3.1.** "current operate interface choice" introduction:

**General:** "CONTROL" with the right voice control button is to control output status of system zone, these included group configuration, appoint EVAC-500 host or DVA6-500 extension host 's single zone output control.

- 1. "STATE" is for checking the working status of system's device module.
- 2. "SYSTEM CONFIGURATION" for check or modify the working device data in current system
- 3. **"LOG"** is for checking data record of system device and module.
- 4. **"OTHER"** is for modify the user's login password, correct the time of EVAC-500 host and modify the speaker impedance error of DVA6-500 system, the percentage more larger means accuracy is more lower.

#### 1.3.1.1. CONTROL

Login software or click the left "CONTROL" as (picture 1) above, it shows message as below:

- In the left shows that they are six group in software
- On the right shows that they are six zone in current system.
- The red LED on the top of right indicate current system worked at emergency model
- The yellow LED shows that is fault with the current system module.

• The red and yellow of EVAC voice button LED off means that EVAC voice message is OK in the current SD card

#### **Description:**

- On the left hand is DVA6-500 or DVA6-500RT panel line output control knob, software's just shows current effective line output
- software's system group can be set from 0~120, via"system configuration"-"Equipment parameter" to confirm the group number(default is six),each zone in the group can set via "Group"
- Put the mouse to the empty place of grouping list and double click or press "
   <sup>III</sup> <sup>ALZONES</sup>
   <sup>III</sup>
   <sup>IIII</sup>
- Please click group items in group list to check zones include the gourp, such as click group six
- Show as below:



In above picture, the blue background in left hand means is chosen, in the right hand shows that there are six zone in this group. You can add or delete more zone of host or extension host After modify please make sure to click "Application" after modify)

① The red LED on the top right can only reset via the red EMERGENCY button on the front panel of DVA6-500 or "3-Emergency Reset Input" in rear panel, user can use software to control the active of EVAC message can not be off (zone can be open or off) under the emergency mode.

2 You can check Yellow LED by click "State" then double click the item you need to check



#### **Operation and control**

- ① The operation of assigned host and assigned zone are as below (to output the assigned audio or turn off the zones)
  - There will be come out one button when move the mouse to the middle of 'HOST ID', then click "zone 0X" then click it again to control the zone (the button will be disappear automatically if click the mouse at anywhere except the button)
- 2 The single zone control of assigned host

- For example, if want to control zone 2 of the host, only need to find 'ZONE 02'from the right of '01', which under 'HOST ID', then click.
- 3 Group control (output the assigned audio)
  - Choose the target zone: use the mouse to choose the corresponding group from the left middle (the list box from the right middle will indicated the zones of the current group)
  - To choose the output audio: use the mouse to click 'EVAC MESSAGE' (it need on emergency status) or 'LINEINPUT AUDIO' audio on the right side.

All system zones control(for sure it will be the same result if you put all the system zones to one group or multi groups) Choose the target zone: Click "all zones" then choose output audio (Click 'EVAC MESSAGE'(it need to be a emergency status) or 'LINEINPUT AUDIO' audio from the right side).

Turn off the group

➤ 1.Choose the target zone

> 2.To choose the output audio: use the mouse to click 'EVAC MESSAGE'(it need to be a emergency status) or 'LINEINPUT AUDIO' audio from the right side.

() EmergencyVoiceAlarmSystem		
System View Manage Help		
🎄 i 🕑 i 💥 i 🔚 i 🔪	👌 I 💢 I 🐳 I	
System Control _Config	STATE & EQUIPMENT ID	DETAILED
<b>G</b>	🖌 Host 01	Device online: online   AC poser: normal   DC poser: normal   MIC state of emergency(PTT): normal   Main amplifier: normal   Spare amplifier: normal   Sp card online: normal
STATE		
Equipment parameter		
💦 Fire mode		
Group		
Audio priority		
LOG		

# <mark>1.3.1.2.</mark>STATE

#### Equipment status.

"STATE&EQUIPMENT ID" show the current equipment device, including Host, extension host, and business MIC:

**DETAILED**" State list of the corresponding equipment ID, If it is on Host or extension host, you can double click to see it's details. Please see below.:

Device onlines s	status online						
AC power state	s Normal		DC po	ower states No	one		
Main amplifier s	states Normal		Spare	e amplifier states	None		
Emergency micr	ophone statu ( PTT )	Normal	SD ca	ord status Norm	nal		
SPEAKERS I	PARTITION BUS	STATUS —					
Z	ONE 01	ZONE 02	ZONE 03	ZONE 04	4	ZONE 05	ZONE 06
A: 1	Normal	Normal	Normal	Normal		Normal	Normal
B: 1	Normal	Normal	Normal	Normal		Normal	Normal
CONTACT IN	IPUT STATUS –						
INPUT 01	INPUT 02	INPUT 03	INPUT 04	INPUT 05	INPUT 06	INPUT 07	INPUT 08
Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
CONTACT O	UTPUT STATUS						
RELAY 01	RELAY 02	RELAY 03	RELAY 04	RELAY 05	RELAY 06	5 🗌 RELAY 07	RELAY 0

#### Above picture please see below instruction.

- "online" means device online;
- "offline" means device offline, Please check whether there is a fault detection on line cable or no device ;
- "Normal" means device model is normal;
- "Fault" means device fault;
- "None" means the DIP on the host rear panel was forbidden to the function. In other words, system function without configuration;
- "Open" mean speaker or CIE detection loop is open. In other words, system detects the impendence is more than 10%-30% of the speaker first time system building, base

on" \*\*\* " 《can not designate error to single device or designated zone》 or cable is disconnect between device to CIE (if device input configuration is "Level mode");

- "Short" means speaker or CIE is short circuit, that is detecting the speaker loop impedance is (10%~30%) more than the one system first time building. Zone short circuit forbid to control the zone(forbid the output automatically to protect the amplifier, until the failure recovery) or cable short circuit between speaker and CIE (if device input configuration is "Level mode");
- "CONTACT OUTPUT STAUS" Device relay contact output can be controlled by click. Its output status can be programming by the contact event in the "Fire mode";

#### 1.3.1.3. SYSTEM CONFIGURATION

- 1. Mainly use to check the details of system configuration parameter;
- 2. Setting fire alarm rule;
- 3. Setting operate group in software;
- 4. Change priority of audio upon special condition;

#### **1.3.1.3.1.** Check details of equipment parameter

From "SYSTEM CONFIGURATION" to "+" to "Equipment parameter" and double click ti will show the dialog box of host, extension host and business microphone setting as below:

💊 Equipment Parameter	>
GLOBAL	
Host number(1 ~ 20):         1         System grouping number(0 ~ 120):         6	~
EVAC host emergency MIC: Prompt voice switch Prompt voice index number (PUSH):	Prompt voice index number(RELEASE ): 2
PARTITION ENABLE CONFIGURATION	
Select all Speaker zone 01 Speaker zone 02 Speaker zone 03	Speaker zone 04 Speaker zone 05 Speaker zone 06
PAGING	
Prompt voice index:         Paging prompt tone switch:       Image: Prompt voice switch    Prompt voice index number (PUSH):	✓ Prompt voice index number(RELEASE): 2 ✓
Group configuration:	
Paging -01 group -01: host 01: none;	Group 01
Paging 01	>
Application CK	Cancel

- ① You can use drop down list box which at the right of "Host number(1~20)" to set the number of host and extension host number (System must set one host, if host number is more than one, "^"and"v" button on the right of "PARTITION ENABLE CONFIGURATION" can be used);
- ② User can set warning tone of starting and stopping for EMG MICROPHONE, when use it, need from "PUSH" and "RELEASE" to choose the series number of bell in the "prompt" of SD

card, " <sup>✓</sup> <sup>Prompt voice switch</sup> "means choose, " <sup>□</sup> <sup>Prompt voice switch</sup> "Means not choose;

③ User can base on the condition to allow or forbid single zone of host or extension host, if

check box of zone under "PARTITION ENABLE CONFIGURATION" is "



can.

means can not. Default is all can be.

④ Through "Quantity allocation(0~32)" user can set the number of business microphone or fireman microphone which connect to the host, then click "Address assignment..." to set the microphone parameter :

Paging Address Configuration								×
	Γ							
		ID	NAME	TYPE	ADDRESS			
		01	Paing 01	Business paing	01			

(1)."ID" show number of connecting microphone-please set it exactly as connection;

(2)."NAME" means microphone's name, set by system automatically;

(3). "TYPE" means microphone's type, user can choose between "Fire paging" and "Business paging";

(4)."ADDRESS" means microphone address, please make the connection microphone is corresponding with 1-5 number of "link ID", or microphone can not work OK.;

Note: After modify please double click blank place to make sure no drop down list box in this

	Paging Addre	ng Address Configuration						
	D	NAME	-	ACCRESS	1			
	01	Paing 01	Business paging 🗠	51				
photo"								

" then click "OK", or the modify is not successful.

User can use "Paging prompt tone switch" to set the switch and designate warning tone of each microphone, the way is the same as EVAC microphone above. You can set more

microphone by click \_\_\_\_\_ "to change;

> User can set different zone from first microphone's 12 group base on different requirement,



click" "" "to add and delete, click """ to change different group, the specification of group

list	as	be	low	:
------	----	----	-----	---

Group configuration:				
Peging - 01 group - 01: host 01: 01,02,04,05,06; host 02: 01,02,03,05,06;				A Group 01 V
	Paging 01	>		

- (1) "Paging -01 group -01: ":
  - 1) "Paging-01" means microphone's address is 01;
  - 2) "group-01" means group is 01, it can be named 02 or 03, from 01-12;

(2) "host 01: 01, 02, 04, 05, 06; host 02: 01, 02, 03, 05, 06": means zones include all the host zones except 03 zone(system default host01, user can not change) and include all extension host zone except zone4(extension host named from 02, user can not change), if user paging on group mode, when you choose group 01means choose host and extension host both 10 zone to page.

**Note:** please click "Application" after modify, or the setting is not successful.

#### 1.3.1.3.2. Fire mode

#### 1. Set the fire rule;

#### 2. Set the contact out zone and relay connection status;

Click "Fire mode" and picture as below:

CONTACT	mode Che repeat V
CONTACT	mode 👛 One repeat 🗸 🗸
ALARM PARTITION OF OUTPUT AFTER FIRE ALARM ACTIVATION MODE: CONTACT OR LEVEL):	
ALARM PARTITION OF OUTPUT AFTER FIRE ALARM( ACTIVATION MODE: CONTACT OR LEVEL):	
Host - 01 contact 01: host 01: 01,02,03,04,05,06; host 02: 01,02,03,04,05,06;	~//
	Contact 01
LINK RELAY OUTPUT STATE:	v
🗹 Select all 🛛 Relay 01 🗸 Relay 02 📝 Relay 03 📿 Relay 04 📝 Relay 05 🖉 Relay 06 🖉 Relay 07	
< Host 01 >	
< Host 01 >	

#### For above picture :

- ① User can choose "Specify zone" or "All zone" from the right drop list of "Alarm mode":
  - Specify zone" means when system detect host or extension host's "Trigger Inputs" have fire signal input, only play EVAC message to designated zone of corresponding contact in "CONTACT" list, other zone stop output (Note, when the current output audio is not EVAC message and its priority is higher than EVAC voice message, system only start fire mode but not close the current zone output, please note when you set "Audio priority");
  - \* "All zone" means once get fire signal from host or extension host's "Trigger Inputs" then close all zone output and play EVAC voice message;

② User can set delay time of executing fire alarm via "Delay start time(0~300S)", please note the unit is second, if "0" means no delay and execute at once;

③ "Digital Voice Type" is to choose type of EVAC message, can be "EVAC Voice" and "Alert Voice";

④ "Digital voice index" use for setting the index of voice message which stock in the fold of "evac\_message" or "alert\_message" in SD card, "Play mode" use to set way of play(mainly for many voice message);

⑤ "CONTACT" is to set every contact output zone and output connecting relay when there is fire, it is a fast operation, can combine several operation into one operation, it is convenience for user do a quick response under a emergency, same as microphone group setting and operation, the difference is:

(1) Group need to manual operation, contact usually use at uncertain factor or linkage with third party system under emergency;

(2) Group operation not include relay output, while contact include relay output, it is convenience to control third party to linkage

**Note:** Please click "Application" after modify, or the modify is not successful.

### 1.3.1.3.3. System group configuration

Click "SYSTEM CONFIGURATION" then "Group" as below:

ID	NAME	WORK PARTITION	
001	Office area	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;	
002	Waiting Room	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;	
003	Ticket Check	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;	
004	ENTRANCE	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;	
005	EXIT	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;	
006	Rest Room	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;	

#### **Description:**

- 1. "ID" is a system number;
- 2. "NAME" this is name user, usually use a easy remember name so you can remember it easily. Such as below (system default is "GROUP 01...), Click the item then enter modify mode (most 12 character), press "Enter" to set next group;

3. "WORK PARTITION" show zone list in current group, double click can add or delete sub item;

AC System	Grouping Configur	ation	GROUP 01 0	101				×
ID	NAME	WORK PA	- Pendi	ng Selection ———		— Current :	Selection List	_
001	Office area	host 01: 1	HOST I	D ZONES LIST		HOST ID	ZONES LIST	
002	Waiting Room	host 01:	1 Host 1	2011231131				
003	Ticket Check	host 01:				01	zone 01	
004	ENTRANCE	host 01:				01	zone 02	
005	EXIT	host 01:				01	zone 03	
006	Rest Room	host 01:				01	zone 04 zone 05	
						01	zone 05 zone 06	
						02	zone 00	
						02	zone 02	
						02	zone 02 zone 03	
					>	02	zone 04	
					SHERE HE	02	zone 05	
						02	zone 06	
					11111111111111111111111111111111111111	02	2010 00	
					->>			
					a state for the for			
					<<-			
					2 Mars			
					<			
					2011/11/11/11/1			

① Left top of dialog box show current zone number;

② Left part is current zone list, choose and add to the right means add the zone in current group, you can double click corresponding zone or though "Shift" and "Ctrl" button to continuous choose or discontinuous choose, also can add or delete though the middle operating button;

③ ">" and "<" as a single zone operation, ">" indicates that add the system zone to the current group, "<" is a opposite operation, delete selected zone from the current group;

(4) "<<" and ">>" means deleting all zone and add all zone to the current group

Note: Please click "Application" after modify, or your setting will not be successful.

#### 1.3.1.3.4. Device Audio priority configuration

Click "SYSTEM CONFIGURATION" then click "Audio priority" as below:

lost Index	01 ~	
ID	AUDIO NAME	PRIORITY
01	Emergency MIC(PTT)	01
02	Business Paing 01	02
03	EVAC audio	34
04	Alert audio	35
05	Network audio	36
06	Line 01 audio	36
07	Line 02 audio	36
08	Line 03 audio	36
09	Line 04 audio	36
10	Line 05 audio	36
11	Line 06 audio	36

see Image above:

① "ID" number is automatically added by system;

② "AUDIO NAME" is the audio in the host;

③ PRIORITY "means audio's priority, but it also directly affect of the output permission of current audio, please be careful when modifying, the above figure is default settings of this system;

#### Instruction:

1. User can on line or off line to set the system parameter and save it though "1. User can on line or off line to set the system parameter and save it though"

2. User can load the back up system parameter though " — need manually synchronize after loading;

# 1.3.1.4. LOG inqiury

Click "LOG" as below:

System View Manage Help				
🎄 I 🕐 I 💥 I 🔚 I '	🏑 I 🔉	🗶   ≼   🈂		
stem Control _Config	Log type:	All	V Filter	Start time: 4/ 2/2016 • End time: 4/ 2/2016 • •
	ID	CALENDAR	LOG TYPE	DETAILED
STATE	1	2016-04-02,08:27:24	Amplifier status	Host 01 main amplifier normal,spare amplifier fault.
	10	2016-04-02, 11:37:48	Alarm info	The host fire reset manually.
SYSTEM CONFIGURATION	11	2016-04-02, 12:01:54	Equipment power status	Host 01 AC power normal, DC power not configuration.
	12	2016-04-02, 12:01:55	Equipment power status	Host 01 AC power normal,DC power not configuration.
Equipment parameter	13	2016-04-02, 12:01:55	Alarm info	Host 01 contact diagnostic to the fire.
<u>.</u>	14	2016-04-02, 12:01:55	Alarm info	Host 01 contact diagnostic to the fire.
🥡 Fire mode	15	2016-04-02, 12:01:56	Amplifier status	Host 01 main amplifier normal, spare amplifier normal.
And Comments	16	2016-04-02, 12:02:00	Speaker partition bus status	Host 01 speaker zone state changed:Zone 01: A-Normal,B-Normal.   Zone 02: A-Normal,B-Normal.   Z.
Group	17	2016-04-02, 12:03:14	Speaker partition bus status	Host 01 speaker zone state changed:Zone 01: A-Normal,B-Normal.   Zone 02: A-Normal,B-Normal.   Z.
Audio priority	18	2016-04-02, 12:03:15	Fire paing	Fire paging 01 offline.
Addie phoney	19	2016-04-02, 12:03:29	Speaker partition bus status	Host 01 speaker zone state changed:Zone 01: A-Normal,B-Normal.   Zone 02: A-Normal,B-Normal.   Z.
	2	2016-04-02,08:27:26	Speaker partition bus status	Host 01 speaker zone state changed:Zone 01: A-Open,B-Normal.   Zone 02: A-Normal,B-Normal.   Zo
_	20	2000-00-00,00:00:00	System test	System into test mode.
OTHER	3	2016-04-02,08:27:38	Speaker partition bus status	Host 01 speaker zone state changed:Zone 01: A-Normal,B-Normal.   Zone 02: A-Normal,B-Normal.   Z.
<b>—</b>	4	2016-04-02,09:46:16	Alarm info	Host a manual into fire mode.
🌄 User and password	5	2016-04-02,09:46:16	Alarm info	The host fire reset manually.
~	6	2016-04-02,09:46:16	Alarm info	Host a manual into fire mode.
	7	2016-04-02, 11:27:18	Alarm info	The host fire reset manually.
	8	2016-04-02, 11:33:42	Speaker partition bus status	Host 01 speaker zone state changed:Zone 01: A-Normal,B-Normal,   Zone 02: A-Normal,B-Normal,   Z
Impedance Sensitivity	9	2016-04-02,11:37:38	Alarm info	Host a manual into fire mode.

#### **Description:**

- "ID" no sense;
- 2 "CALENDAR" Means data of the module;

③ "LOG TYPE" means LOG type ( use for search when there are many record, can have quick checking);

④ "DETAILED" Means details of current log;

#### **Description:**

User	can	check	designate	d time	record	ling	though	"Log	type"	and
" 🗌 Filter	Start tin	ne: 4/ 2/2016	End time	4/ 2/2016	and	click	"⊟" on to	oling bar	to save t	he log

as excel sheet.

#### 1.3.1.5. OTHER

- 1. Change password;
- 2. Correct system time;
- 3. Adjust speaker zone impedance;

#### 1. Change user password:



① Click "User and password":

will quit automatically);

2 Password correct will show as below:

user input password (If wrong, system

USER NAME	PASSWORD		
admin			
			Application
			Cancel

#### Description

- ① "USER NAME"—— Means name of the current login user. Double click to enter edit state.
- ② "PASSWORD"——Means password of the current login user. Double click to enter edit
- state.
  - ③ After edition, please click Application, otherwise your settings can not be completed.

#### 2. Proof controller time.

Click "EVAC system timing" as below:

EV	AC system tim	ning				×
ſ						
	Date:	Saturday ,	April	2, 2016		
	Time:	4:57:53 PM			Ŧ	
-						
	🗹 Auto	9:31:00 PM			•	
		pplication		X	Cancel	

#### **Description:**

- ① "Data" and "Time" means date and time, display time is the current computer time;
- ② "Auto" for software automatic proofreading the host of time;

**Note:** After edition, please click Application, otherwise your settings can not be completed.

#### 3. Speaker zone impedance error adjustment:

Click "EVAC system timing" Select allowed error range of current speaker circuit from the drop-down list box of the pop-up window(if it is wrong report, can rise the percentage preperly).

#### Attention

- Don't put the system device installed in direct sunlight or near the heating element, because the device may fade deformation, or stop working by the high temperature into protection state.
- Don't install or stored the system equipment in a dusty or wet place, otherwise it may disturb working stability or cause intermittent fault.
- 3) Keep the system equipment be away from strong magnetic field equipment as far as

possible in case of high electromagnetic interference effects the normal operation of the system equipment.

- 4) When the system set with several pieces of DVA6– 500RT in the same cabinet, in order to keep a good heat dissipation, please leave corresponding space between each equipment.
- 5) Remote Microphone DVA8-500RM with 24V phantom power supply. When it is indicating power led become dimming or indicating not working correctly, please shorten the wire.(actual measurement Cat5 can normal working in 600M.Pay attention to the whole length of ring, not single equipment 600M.)
- 6) Have a backup for main device lines, Please set configuration accordingly to your requirements. If major fault cause system not working, please contact our After Sales Service for Repair processing. Built-in accessories, Do not dismantle machine without permission in order to avoid the equipment or module's permanent damage and electric shock hazard.
- 7) In order to ensure reliable work, Please ensure a good ground connection.